

# **Indicators of NGO Security in Afghanistan**

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**IP 653: Security and Development**

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**Abstract:**

In Afghanistan, development projects play a critical role in the creation of democracy. However, the precarious security environment and large number of attacks on NGO workers stall development efforts. Arguments on NGO security claim that violence against aid workers is the result of US military presence, local warlords, poppy cultivation, differing ethnic groups, and distance of the aid project from Kabul. The author tested these arguments through statistical analysis and key informant interviews. Using the number of security incidents against NGO's during a 14-month period as a dependent variable and each province as a case, the author conducted individual statistical analysis of each argument. No single variable proved to be largely significant. However, when all independent variables and data were combined in a multiple regression, three factors proved to be significant. One, if the province borders Pakistan, it will have a significantly larger level of violence on average. Two, an increase in poppy cultivation correlates to a reduction in violence against NGO's. Three, provinces with a higher percentage of home radios correlate to a higher level of violence against NGO's. Overall, the model accounts for about 54% of the variation in violence rate against NGO's. These results suggest an integrated approach to military (security) operations and NGO (development) projects is critical to the success of Afghanistan as a democracy.

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## List of Acronyms

ACBAR- Agency Coordinating Body for Afghan Relief  
ACSO- Afghanistan Central Statistics Office  
AKDN- Aga Khan Development Network  
ANA- Afghanistan National Army  
ANSO – Afghanistan Non-Governmental Organization Security Office  
CDI- Center for Defense Information  
GIS- Geographic Information Systems  
ISAF – International Security Assistance Force  
MRF- Médecins Sans Frontières  
NATO – North Atlantic Treaty Organization  
PRT – Provincial Reconstruction Team  
UNAMA – UN Assistance Mission in Afghanistan  
SPSS- Statistical Package for the Social Sciences

In Afghanistan, development programs and the work of NGO's help maintain a fragile peace. Three years after the United States and coalition forces removed the Taliban government, insecurity and violence are more prevalent than ever. Warlords, drug traffickers, and terrorist organizations control many regions in Afghanistan. As these actors battle for power, attacks against aid workers increase. With each attack, money, resources and personnel are stripped from projects essential to Afghanistan's reconstruction. In the words of CARE Canada, "without greater security, reconstruction will remain stalled...without reconstruction, insecurity will continue to thrive."<sup>1</sup>

Within Afghanistan, there are more than 17,000 US soldiers and 8,400 members of the NATO-led force.<sup>2</sup> Additionally, there are 15,000 newly trained ANA soldiers and 30,500 new police officers trained by the German military.<sup>3</sup> With all of these security forces in country, there remains a large-scale problem of insufficient security for development projects. Warlord militias and bandits run free with no intervention by Afghan or coalition security forces. This drives the question: *How does one provide security to NGO's working on development projects in Afghanistan?*

Many policy documents outline different procedures for securing the country. Few of these papers have analyzed the acts of violence and tried to determine which variables, situational or policy, correspond to decreased security. Through analysis of key variables over Afghanistan's provinces, specific strategies to combat insecurity can be developed.

### **Causes of Violence against NGO's**

Acts of violence against development workers and the Afghan population continue three years after the fall of the Taliban. The violence is wide spread with gang rapes of a female aid worker near Mazar-i-Sharif<sup>4</sup>, Taliban attacks on Afghan voters near Jalalabad<sup>5</sup>, and looting in Herat<sup>6</sup>. Analysts, NGO's and the military provide a variety of reasons for these attacks. After reviewing literature and contrasting opinions, several hypotheses emerge about the relationship of security and development in Afghanistan.

The contrast in security level between Kabul and other areas of Afghanistan dominates many arguments on insecurity. ISAF and the majority of the newly trained police operate in and around Kabul. This security umbrella constrains money for development projects outside of the capital city.<sup>7</sup> ISAF firmly resists spreading its force outside of Kabul or adding any additional troops.<sup>8</sup> The ratio of armed attacks outside of Kabul compared to inside has reached seven to one.<sup>9</sup> Therefore, the first hypothesis is: *As the distance of the project group from Kabul increases, it is more likely the group will come under attack.*

Many scholars find the violence against NGO's the result of conflict between the large number of ethnic groups in Afghanistan. The majority of the government officials hired by the Bonn Agreement were Non-Pashtun's (Pashtun's are the majority ethnic group). Therefore, the constant battling between Tajiks, Pashtuns, Hazaras, Uzbeks, and Iranian Shiites creates spill over effects that increase violence on aid workers.<sup>10</sup> This creates a second hypothesis: *Development project groups will come under more or fewer attacks based upon which ethnic group(s) control the province.*

Many UN officials, NGO's and even portions of the Afghan government feel that US military presence in the country slows the transition to democracy. Conflicting US military objectives enhance the power of regional warlords at the expense of overall security and Afghan governance.<sup>11</sup> By paying militias to hunt for former Taliban

members and Al Qaeda operatives, the US military helps local warlords maintain authority in their area of control. This undermines the power of the central Afghan government as they attempt to establish provincial control. Some feel the US turns a blind eye to the atrocities committed by warlords and their followers because they need the militias to support military objectives. The larger goal of rooting out the Taliban and capturing Osama Bin Laden overshadows the need for NGO security.<sup>12</sup> This proposes a third hypothesis: *If US military forces are present in the region, it is more likely that the group will come under attack.*

The battle between warlords for regional control undermines the safety and progress of development. One strong warlord that dominates a region may maintain better security than the national government. With several smaller militias, insecurity rises as these forces compete for power and control of the region. The city of Mazar-i-Sharif exemplifies this phenomenon.<sup>13</sup> Mazar-i-Sharif, the most powerful city north of the Hindu Kush, straddles road networks that lead into Turkmenistan, Uzbekistan, and Tajikistan. Since the invasion of US forces, several battles have occurred between the forces of Abdul Rashid Dostum (Uzbek warlord appointed deputy defense minister), Ustad Mohammed Atta (Leader of Jamiat-i-Islami) and Karim Khalili (Leader of Hezb-i-Wahdat, a Hazara group). Although each of these groups contributed 200 fighters towards an integrated police force in the city, violence continues with many small skirmishes between these forces.<sup>14</sup> These battles create a security vacuum which creates spillover violence against NGO workers such as the gang rape of a French female aid worker in March 2002.<sup>15</sup> A fourth hypothesis states: *If there is one warlord in charge of the province, the aid group is less likely to come under attack.*

Despite their many faults, the Taliban government curbed the cultivation of poppy in Afghanistan. Since the fall of the Taliban, poppy cultivation rebounded to near record levels in 2002 and 2003. The opium-poppy cultivation produces \$2.3 billion in income and more than 50% of Afghanistan's GDP.<sup>16</sup> The value of poppy production develops power struggles between local warlords trying to maintain control of drug revenues. For the first time in Afghanistan, production facilities convert poppy into heroin.<sup>17</sup> With so much income dependent on poppy cultivation, development workers can be caught in the middle of power struggles. Aid workers operating in provinces with high levels of poppy cultivation or traveling along drug trafficking routes are prime targets for violence. A fifth hypothesis is: *As the concentration of poppy cultivation in the project area increases, it is more likely the group will come under attack.*

### **Data Collection and Variable Creation**

Accurate testing of the different arguments in this study required quantitative and qualitative data. Finding data for a country conducting post-conflict reconstruction proved difficult. The key to this study is establishing a measure for NGO security. CARE International in cooperation with the Center on International Cooperation created a policy brief for a conference in Berlin. This document outlined the desperate situation for aid workers in Afghanistan.<sup>18</sup> In its arguments, this brief utilized the Security Incident Database of ANSO. This database provided a count by province of attacks against aid workers. These attacks are defined as, "incidents involving armed confrontation targeting the UN, Red Cross, NGO's and aid contractors." This data does not include, "burglaries, threatening 'night letters', corruption or other non-violent

incidents.”<sup>19</sup> (A copy of the ANSO chart for security incidents can be found in Appendix A)<sup>20</sup>

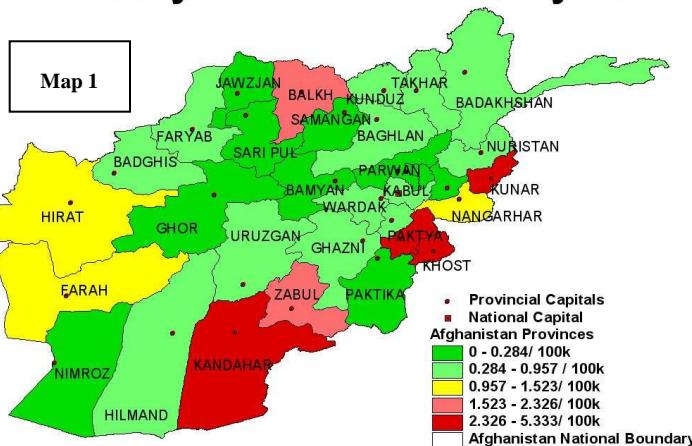
The ANSO data on NGO security incidents provided an outstanding base for measuring NGO security. It also established each of the 32 provinces of Afghanistan during 2003 as a case for analysis.<sup>21</sup> The figures provided by ANSO are good raw data but needed to be transformed. The best way to measure the intensity of violence against NGO’s is to determine the density of NGO workers in the province. The author found no measurement of NGO population by province. Measuring NGO population over an extended period is difficult because NGO workers move from province to province and there is no central method for collecting this data from all aid agencies. Another measure

of the violence rate

incorporated the population of each province and could be done easily using the recent March 2003 census data provided by the Afghan Central Statistics Office. Therefore, the dependent variable became the number of reported security incidents against NGO’s in each province during the time period of 1 January 2003 through 15 February 2004 divided by the population of the province (Sec100k).

Dividing the number of

## NGO Violence in Afghanistan 1 January 2003 - 15 February 2004



security incidents by province population better illustrated the intensity of violence against NGO’s.<sup>22</sup> Map 1 shows the intensity of the rate of violence against NGO workers using this method. (For calculations see the Policy Analysis Worksheet in Appendix A)

The first hypothesis argues the level of central government control over the outlying provinces. As the distance from Kabul increases, the rate of violence should also increase. One method of measuring this distance was to draw the shortest possible line from the capital to the provincial boundary. However, this method did not take into account the unique landscape of Afghanistan and the increased difficulty in traveling over the mountains to the northern provinces. Calculating the number of kilometers by major road from each provincial capital to the national capital provided a better way to measure the distance variable (distance). This method emphasized that national power is extended through the provincial capitals. This also showed that provinces such as Meymarte in Faryab are far more difficult to reach by ground than Kandahar even though Meymarte is closer to Kabul in straight line distance than Kandahar.<sup>23</sup>

Testing the second hypothesis (Ethnic Group) proved to be impossible based on current data and the cases used in this study. Although there are discussions about the ethnic problems in Afghanistan, there are few statistics that measure the actual ethnic groups in each province. There are a couple of maps which displayed the location and diversity of ethnic groups in Afghanistan (Map 2).<sup>24</sup> These maps are excellent for identifying the mixture of different ethnicities, but they provided no quantitative methods

for measuring the density of these ethnic populations by province. Some statistics reported the ethnic breakdown of select Afghan cities. However, these numbers are

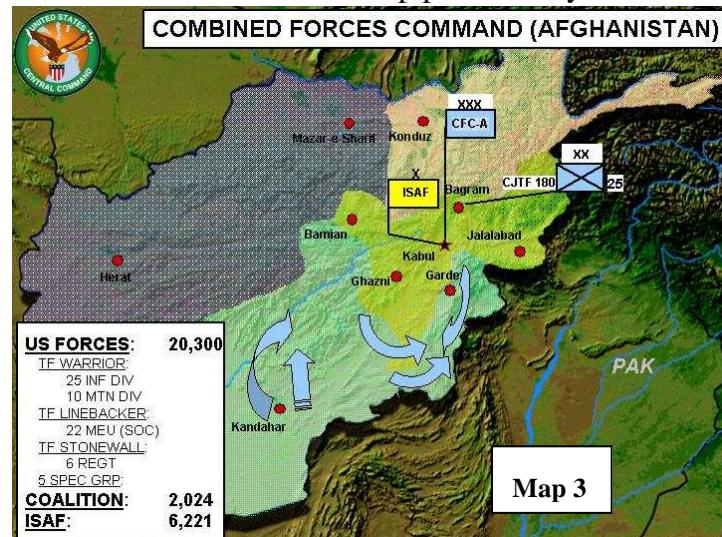


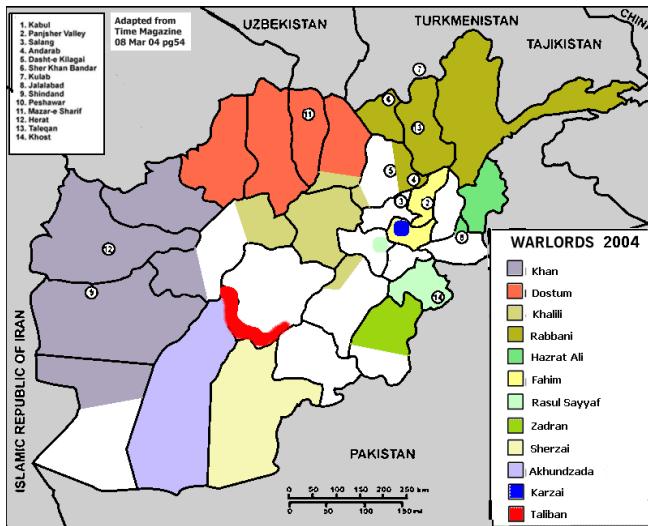
difficulty in gathering ethnicity statistics and the arguments of key informants, the ethnic group hypothesis and variable were dropped from the study.

The Department of Defense broadcasts little information on the location of US military units. In determining whether the US military operates in an Afghan province, this study incorporated three different sources. The first is a map produced by the website GlobalSecurity.com (Map 3).<sup>26</sup> On this site, a map showed sectors for ISAF and US military forces. However, this map was not enough to make a clear distinction as to where US military forces operate. A second map showing the location of military Provincial Reconstruction Teams agreed with the Global Security Map. Using information found on these two maps, the US military sectors were discussed with sources 2-VR, 2-IA and a third US Army officer. All three sources agreed with the military sectors of operation used in this paper. Additionally, a comparison of newspaper and ACBAR reports confirmed many of the US troop locations. GIS files and available data generated a map showing US military locations (See Appendix C).

Determining the level of warlord control in a province is difficult. This hypothesis tests whether the dominance of one warlord within a province will create more security for NGO workers. Two sources provided information on warlord activities within provinces.

neither extensive nor sufficient for statistical analysis. The hypothesis of ethnic group proved to be incorrect in the opinion of three separate interviewees. A US Army officer, a university professor, and an Afghan woman with NGO experience within the country all believed that the ethnic group had no large significance on the violence rate against NGO's. They agreed that measuring ethnicity in Afghanistan is extremely difficult. They thought the violence against NGO workers could not be characterized strictly by prevalence of one ethnic group.<sup>25</sup> Due to the

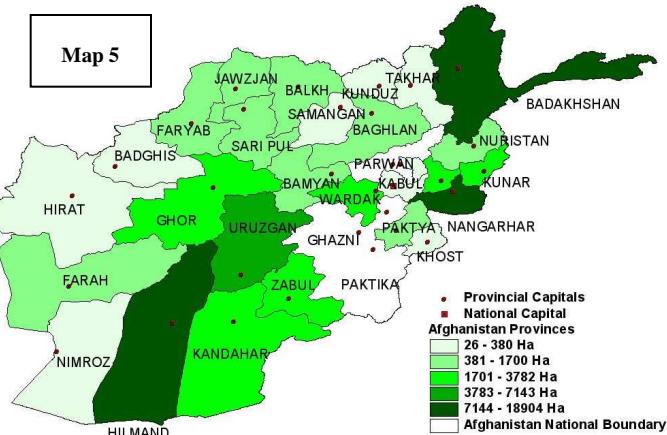




The first was the website GlobalSecurity.org. A map showing the individual warlords and their areas of influence provided a graphic layout with comparison to provincial boundaries (See Map 4). Comparing this with the CDI terrorism report on warlords in Afghanistan, each province was coded with a one or a zero.<sup>27</sup> A value of one signifies one warlord is in control of the province while a zero represented a vacuum of power or multiple warlords fighting for control.

Map 4

The last hypothesis tested the influence of poppy cultivation on the violence rate against NGO workers. The United Nations Office on Drugs and Crime in coordination with the Government of Afghanistan, Counter Narcotics Directorate, produced the Opium Survey 2003. This document provided the cultivation of poppy in hectares by province in 2003.<sup>28</sup> There was one shortcoming with this survey. It did not provide statistics for four provinces; Ghazni, Lowgar, Parwan and Paktika. Despite the absence of some data for these problems, the opium survey is the best quantitative measure of poppy cultivation. Map 5 depicts the density of cultivation by province.



### Testing of Initial Hypotheses

After determining the quantitative and qualitative measures for four of the five original hypotheses, all data was entered into SPSS software. The first round of statistical analysis focused on those arguments found during literature review. The results of these statistical tests are interesting and surprising.

The first statistical test focused on the hypothesis: *As the distance of the project group from Kabul increases, it is more likely the group will come under attack.* Because both variables are metric, this study conducted a simple linear regression analysis. This analysis showed there was no relationship between the independent variable (Distance) and the dependent variable (Sec100k). The F-statistic and large p-value (0.504) showed

no significance between the two models. The R-square value (0.015) means the variation in distance from Kabul explains only 1.5% of the variation in violence rate. The scatterplot of this linear regression does provide some insight as to why there is no statistical relationship. The provinces of Khowst, Paktika, Konar and Kandahar all lie far from the best fit line for this regression. These provinces have high rates of violence and fall within five hundred kilometers of Kabul.

Additionally, all four of

these provinces share a border with Pakistan. This peculiarity will be important in upcoming analysis. Based on this linear regression analysis, one cannot use the distance from Kabul to predict the level of violence against NGO's. A complete summary of statistical analysis for this hypothesis can be found in Appendix B.

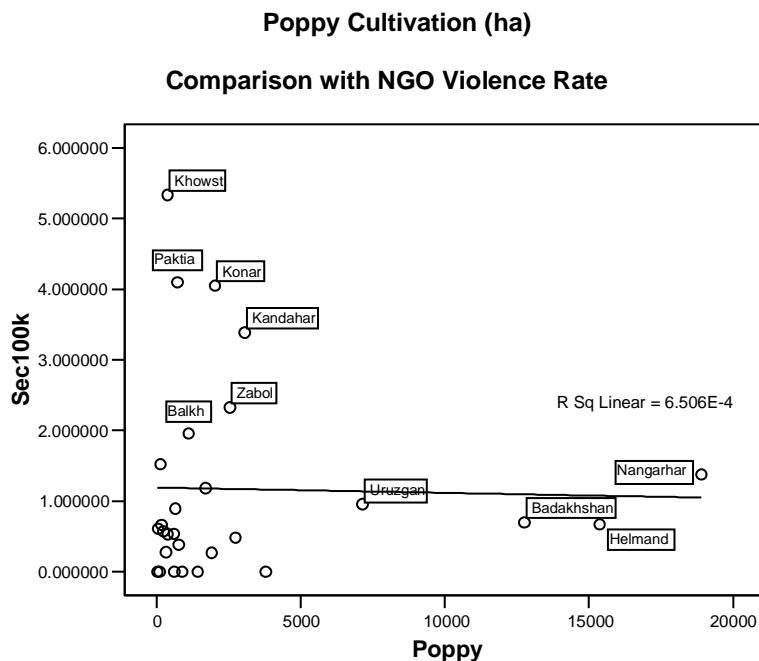
The second statistical test concerned the role of the US military with respect to violence against NGO's. The hypothesis stated: *If US military forces are present in the region, it is more likely that the group will come under attack.* Having one metric variable and one categorical variable, this study decided to conduct an analysis of the difference of means between those provinces with US military presence and those provinces without US military presence. After running an independent T-test analysis, results showed a significant relationship between US military presence and higher rates of violence against NGO's. Comparison of mean violence rates between those provinces with US military presence and those without displayed a large difference. In the twenty provinces with US military presence the average number of NGO security incidents per 100,000 population was 1.42. For those provinces without US military presence, this rate fell to about 0.50 incidents per 100,000 people. When comparing these two values, one cannot rule out that US military presence increased the violence rate. However, this test did not signify that increased violence against NGO's is caused by US military presence. This analysis simply showed there is correlation between these two variables. Further

statistical analysis needed to be done to solidify that the US military increases the violence rate. These results also supported the counterargument to this hypothesis. This argument assumed US military forces operate in the most dangerous areas and therefore the violence rate is expected to be higher in these provinces. (See Appendix B for additional statistical analysis on this hypothesis)

The third statistical test looked at the power of warlords and their influence on NGO insecurity. The third hypothesis was: *If there is one warlord in charge of the province, the aid group is less likely to come under attack.* Because the warlord variable is categorical, this analysis used the same statistical methods as the US military presence variable. The results of the independent T-test showed no significant difference in the violence rate between those provinces with one warlord in power and those provinces where a power vacuum or battle for power occurred. The average violence rate for the two warlord categories showed little difference. Those provinces with one warlord largely in control held an average violence rate of 1.25 whereas those without a warlord in charge had a rate of 0.84 per 100,000 people.

Testing this hypothesis statistically is difficult for several reasons. One, the region that a warlord controlled did not always match the boundaries of provinces. Some warlords controlled only a portion of a province or controlled an area that lies in two or more provinces. Two, warlord power is constantly in a state of flux. The battles by factions near Mazar-i-Shariff are a perfect example. Most sources claim that Abdul Rashid Dostum is the single warlord in control of the Balkh province. Yet there are many accounts of factional fighting and violence against aid workers in this province. Three, some warlords are more supportive of NGO workers than others. Paul Barker, the Country Director for CARE International in Afghanistan, stated in an e-mail that, “strong warlord presence in a province may be seen as supportive of NGO security ...[some] warlords/commanders are seen as supportive of security in general and the aid community in particular.”<sup>29</sup> He mentioned that Ismail Khan in Herat and Dostum in Mazar-i-Sharif are examples of warlords supportive of the aid community. Additional research needs to be completed in order to identify a stronger relationship between NGO security and the presence of warlords.

The last initial hypothesis was: *As the concentration of poppy cultivation in the region increases, it is more likely the group will come under attack.* Because both variables were metric, this study conducted a simple linear regression analysis. This analysis showed there



was no relationship between the independent variable (Poppy) and the dependent variable (Sec100k). The F-statistic and p-value (0.897) showed no significance between the two models. The R-square value (0.001) means poppy cultivation explained virtually none of the variation in violence rate. The scatterplot of this linear regression showed some outliers which demonstrated why there was no statistical relationship. The provinces of Khowst, Paktika, Konar and Kandahar all lie far from the best fit line for this regression. They had high rates of violence with relatively low levels of poppy cultivation. This was the opposite of what was expected from the hypothesis. More interesting are the provinces of Uruzgan, Badakshan, Helmand and Nangarhar. These provinces had extremely high levels of cultivation and only moderate levels of violence. These cases forecasted a change in the significance of the poppy variable later in multiple regression analysis. Based on the results of this statistical analysis, there appeared to be no credibility to the hypothesis that simply higher levels of poppy cultivation result in higher levels of the violence against NGO's. With further analysis, the significance of this variable would change. For more information on all statistical analysis conducted with these four hypotheses refer to Appendix B.

### **Results of Key Informant Interviews**

The vast amount of literature on reconstruction in Afghanistan explained many of the complicated scenarios in which security, development, and governance collide. However, most articles and journals seemed to have bias in favor of one argument over all others. Early on in research, it became apparent that interviewing people with actual experience in Afghanistan would be important. The author conducted two sets of interviews. The first group of interviewees were individuals working as part of or in support of NGO's. The second group of informants were members of the US military with Afghanistan experience. Afghan citizens, members of the ANA, and members of the Afghan central government would all be outstanding sources. However, time and distance constraints limited the interviews to the two groups mentioned above.

The first group of interviews tried to obtain the opinion of those involved with the NGO community and their responses to the five initial hypotheses of this study. Additionally, interviews attempted to identify any factors not discovered in the literature review that might explain the violence rate against NGO's. The first interview was with an Afghan-American graduate student born in Kabul. During two extended trips in 2002 and 2003, she worked extensively with NGO's in Afghanistan and the Afghan Ministry of Finance. She did not feel the level of violence was related to the distance of NGO groups from Kabul. She also thought from her time in Afghanistan that no one ethnic group caused more or less violence than any other group. She believed the violence resulted largely from former Taliban members still at large in the country.

This source believed the US military exacerbates the insecurity problem in the provinces in which they operate. She felt NGO workers are identified as a proponent of the US military. The use of PRT's reinforced the connection between aid workers and the military. She believed there is little coordination between the US military, the Afghan government and NGO's. As for poppy cultivation, the source thought larger amounts of poppy cultivation reflect a lack of security. If there were adequate security forces, then the production of poppy would be less. An important element of insecurity mentioned by the source was the influence of bordering nations on Afghanistan. She felt

that whether a province bordered Pakistan, Iran, Tajikistan or Turkmenistan was more significant than the distance from Kabul.<sup>30</sup>

Professor Juichi Inada, an instructor at Senshu University in Japan, works for the Japanese government in their efforts to rebuild Afghanistan. During the summer of 2004, Professor Inada spent time in Afghanistan expanding the aid efforts of Japan in disarming Afghan militias. Prof. Inada also believed the distance from Kabul was insignificant. He thought that local warlords attacked NGO's in order to challenge the power of the central government. He also felt the US military hypothesis was false. From his personal experience, he felt the US military deployed to the most dangerous regions. He stated, "the US is doing the dirty work in Afghanistan."<sup>31</sup> He also felt the PRT's were the last resort for development work and represented areas of great insecurity.

Professor Inada identified the warlord problem as the key issue for security. He felt the warlords must be incorporated into the Afghan national government in order to reduce their factional fighting. Professor Inada thought that a comparison between the level of violence against NGO's and US, ISAF and ANA troop levels might produce some interesting results.

Paul Barker, the Afghanistan country director for CARE International, provided some excellent analysis by e-mail. Having reviewed the initial arguments, Barker agreed with other sources that the proximity to Kabul did not equate to greater security. He found it difficult to correlate US military presence with increased violence against aid workers. Barker stated, "it is the very clear view of NGO's that we are more secure if we are not seen to have any association with the military in the south and east."<sup>32</sup> These provinces were identified as outliers in the scatterplots for the distance and poppy variables. His comments reinforce the peculiarly high rate of violence mentioned earlier.

Barker suggested expansion of the data set through the summer of 2004. He cited the murder of five MSF staff in Badghis, eleven Chinese workers in Baghlan, and attacks on AKDN and NGO offices in Badakhshan as recent developments that might change the results of this study. He noted these attacks are outside the routine patrol areas of the coalition and are not Taliban strongholds.<sup>33</sup>

Results of interviews with US military personnel proved to be quite different from initial expectations. Overall, their sentiments did not largely differ from the beliefs of those working in the NGO community. Source 2-VR, a US Army officer with over 18 months experience in Afghanistan, believed there was no connection between distance from Kabul and violence rate. He felt most of the violence stemmed from former members of the Taliban government and Al Qaeda operatives along the border with Pakistan. 2-VR witnessed poppy cultivation but thought the farmers were not creating the violence but were simply trying to make a living. 2-VR agreed that the warlords were a security problem. In his opinion, loyalty goes to the "highest bidder". If the US military pays the highest rate for militia support then they will receive the loyalty of the militias. Consequently, if the local warlord supplies the largest wages, then the warlord will control the militia.

2-VR thought the presence of US military and NGO's in the same provinces did increase the violence rate against NGO's. He explained that the NGO's often did not coordinate with the military, located their bases of operations near the military, and drove the same vehicles and used the same equipment as the military. He believed it is hard for local people to distinguish between the military and the NGO workers. He also thought

the NGO workers were sometimes very naïve about the security situation. 2-VR noted two critical issues for Afghan success. First, the Afghan people must establish a national identity. From his experiences, the people did not see themselves as Afghans. If a security incident occurred in their towns, they usually turned a blind eye and felt it was not their problem. Second, the Afghan central government must build infrastructure and business capacity to ensure economic success.<sup>34</sup>

Source 2-IA, a US Army officer with 6 months service in Afghanistan, provided a similar opinion on the initial hypotheses from a different perspective. 2-IA spent most of his time embedded with the ANA. He agreed with 2-VR that the distance from Kabul provided no relationship with the NGO violence rate. He believed violence against NGO's resulted from local warlords and former Taliban members. 2-IA felt the warlords were a serious threat to Afghanistan's government.

2-IA did not believe the US military increases violence against NGO's. In his opinion, the US military operated in the most dangerous areas and those areas naturally had a higher violence rate. An important note from 2-IA was his belief in the ANA. 2-IA thought the ANA was very competent and should provide security for NGO development projects. This technique places an Afghan face on reconstruction and increases the legitimacy of the central government.

2-IA witnessed large amounts of drug trafficking in eastern Afghanistan. He understood that drug trafficking was a problem but felt the poppy cultivation was the economic lifeline for Afghanistan. He believed the destruction of poppy fields will increase violence against aid workers. 2-IA thought the development focus should concentrate on education, infrastructure development of roads and water wells, and microcredit programs. Poppy eradication should not be addressed until an alternative economic solution is available. Source 2-IA noted other variables, such as seasonal changes, provincial economic prosperity, density of former mujihadeen, and the number of ANA units in the province, might explain the violence rate against NGO's.<sup>35</sup>

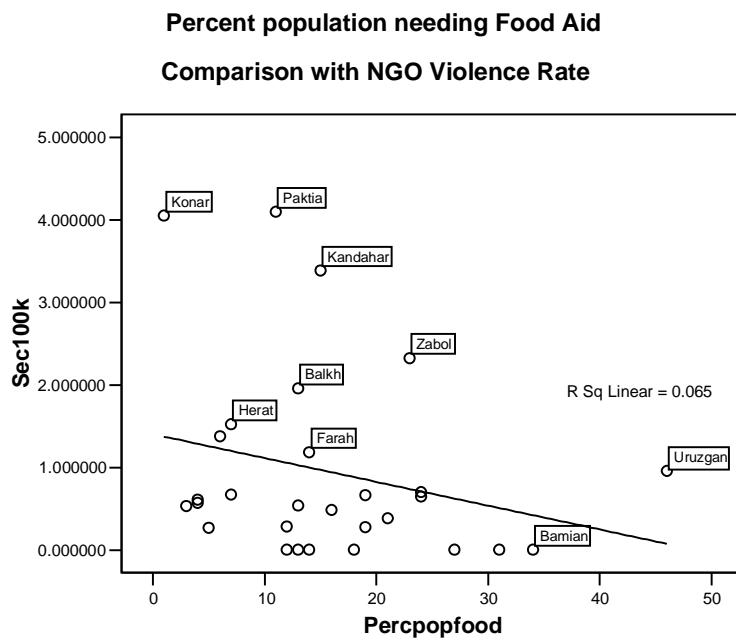
### **Addition of Variables and Further Analysis**

Key informant interviews confirmed the results of the study's initial hypotheses and analysis. These interviews identified new variables which may influence the rate of violence against NGO's. All informants agreed that the distance from Kabul made no difference on the rate of violence. However, several interviews noted a relationship between the border with Pakistan and violence rate. Using this insight, this study created new hypotheses for analysis. The first new hypothesis after interviews was: *If the province shares a boundary with the Afghanistan border, NGO workers in that province are more likely to come under attack.* A new independent variable (ProvAfgBor) specified if a province shares a boundary with the Afghanistan border.<sup>36</sup> Using an independent sample T-test, the F-statistic and p-value (0.002) showed a significant relationship between provinces located on the Afghan border and higher rates of violence against NGO's. Comparison of mean violence rate between those provinces on the Afghan border and inner provinces displayed a large difference. In the twenty provinces on the national border the average number of NGO security incidents per 100,000 population is about 1.5. For those twelve provinces not on the Afghan border, this rate fell to about 0.37 incidents per 100,000 people. Based on these results, the nations bordering Afghanistan may increase the level of NGO violence in Afghanistan.

The second new hypothesis after interviews was: *If the province lies on the Afghan border with Pakistan, NGO workers in that province are more likely to come under attack.* The second new independent variable (BorderPak) specified whether a province borders Pakistan.<sup>37</sup> An independent sample T-test produced a significant F-statistic and p-value (0.000). This analysis showed a significant relationship between provinces located on the Pakistani border and higher rates of violence against NGO's. Comparison of mean violence rate between those provinces on the Pakistan border and all other provinces displayed a very large difference in violence rate. In the eleven provinces on the Pakistan border the average number of NGO security incidents per 100,000 population is about 2.1. For those twenty-one provinces not on the Pakistan border, this rate fell to about 0.54 incidents per 100,000 people. Based on these results, the border with Pakistan appears to influence the violence rate against NGO's. Although this study cannot assume the Pakistan border causes more violence, this variable indicates a dangerous security situation and agrees with many key informant assessments. The distance from the Pakistan border was a better predictor of violence rate than the distance from Kabul.

A neglected area of consideration in the initial hypotheses was the impact of economic development and prosperity in each province and its potential relationship with the violence rate against NGO's. Both military and NGO interviews believed the poppy cultivation was a large source of income. Source 2-VR established money as a factor in the control of local warlords. Obtaining reliable data for variables indicating provincial prosperity quickly became challenging. The ACSO provided outstanding data that could

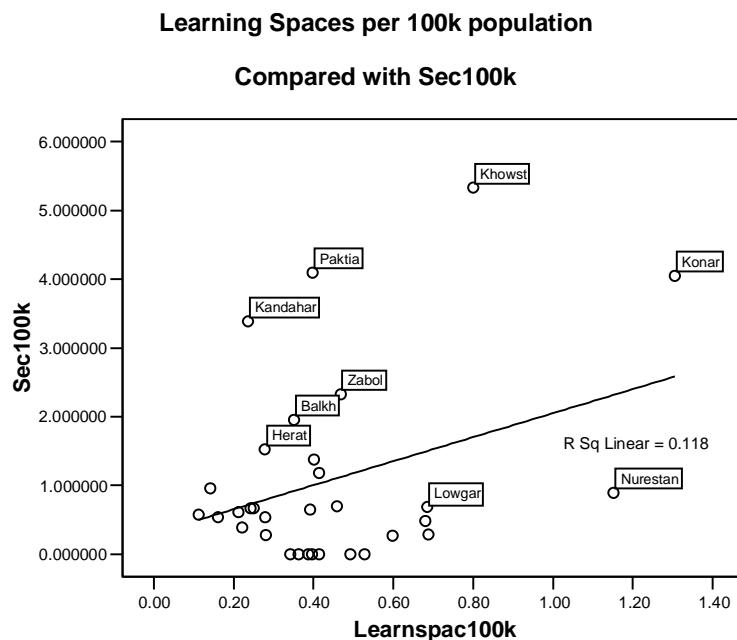
express the prosperity level. The estimates for food aid requirements to vulnerable rural populations in 2002/2003 seemed to be a good indicator of economic prosperity.<sup>38</sup> Those provinces where a larger percentage of the population required food aid would presumably be less prosperous. Using this logic, a third new hypothesis was: *The greater the percentage of the population needing food aid, the greater the rate of violence against NGO workers.*



A simple linear regression between the independent variable, Percpopfood, and the dependent variable, Sec100k, showed there was no relationship between these two statistics. The F-statistic and p-value (0.183) showed no significance between the two models. The R-square value (0.065) showed the percentage of provincial population needing food aid explained almost none of the variation in violence rate. The scatterplot

of this linear regression provided show some outliers which demonstrate why there is no statistical relationship. The provinces of Paktika, Konar and Kandahar all lie far from the best fit line for this regression. These provinces appear violent yet require less than average food aid. However, Uruzgon did need large amounts of food aid and had a moderately high rate of violence against NGO's.

Another available data set was the number of learning spaces per province. A higher number of learning spaces may represent greater human capital formation. With greater human capital, economic development should flourish. The ACSO provided the total number of learning spaces in each province.<sup>39</sup> Dividing this number by the



two models. The R-square value (0.118) showed that variation in learning spaces per 100,000 population explains about 12% of the variation in violence rate. However, the coefficient for learning spaces is positive instead of negative. This result goes against the learning spaces hypothesis. This analysis suggested more schools correlated to more violence.

The scatterplot of this linear regression did provide some interesting outliers. The provinces of Khwst and Konar all lie far from the best fit line for this regression. They had high rates of violence with relatively high number of learning spaces. These two cases defy the argument of the learning spaces hypothesis. Returning to the data set for learning spaces, one finds the learning spaces separated into two categories; formal schools and informal schools. Konar and Khwst both had a high number of informal schools compared with most others. Creating an additional variable for informal schools per 100,000 population, a fifth new hypothesis was: *As the number of informal schools increases, the violence rate against NGO's increases.*

provincial population created another unit of analysis and a fourth new hypothesis: *As the number of learning spaces per capita increases in a province, the violence rate against NGO's decreases.*

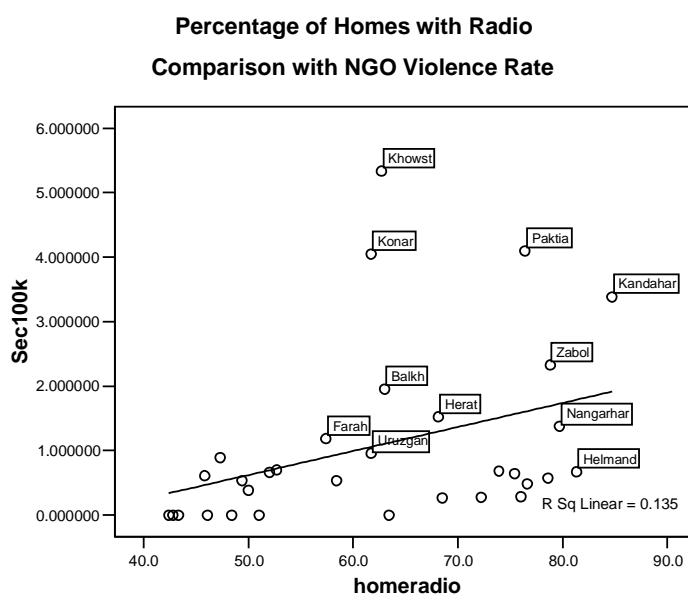
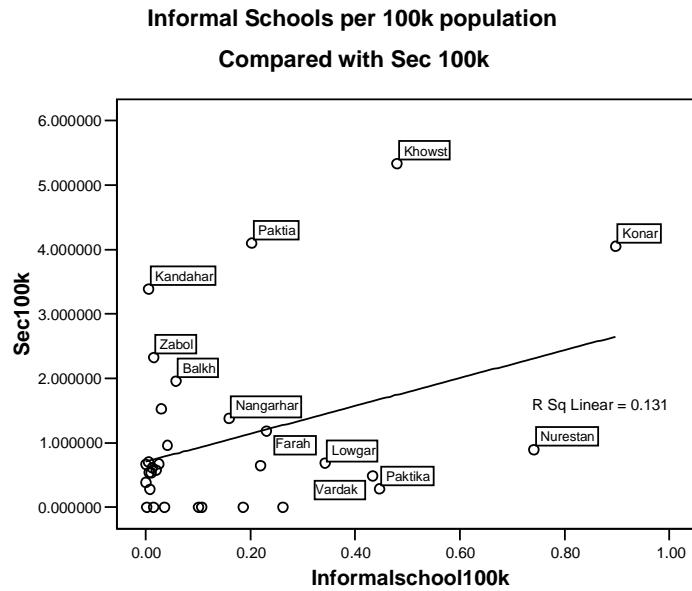
A simple linear regression between the independent variable, Learnspac100k, and the dependent variable, Sec100k, showed a relationship between these two statistics. The F-statistic and p-value (0.054) showed some significant relationship between the

A linear regression between the independent variable, Informalschool100k, and the dependent variable, Sec100k, showed a significant relationship in the predicted direction. The F-statistic significant and p-value (0.042) showed some significance between the two models and the R-square value (0.131) reflected some unique aspects of informal schooling. Although one cannot infer causation, the informal school data signaled changes in the violence rate against NGO's. The scatterplot suggested the relationship might be influenced by the outliers of Khowst and Konar. Both have large variance from the best fit line. The province of Nurestan placed doubt on the significance of this hypothesis. Nurestan maintains a high rate of informal schools yet the violence rate remained below one incident per 100,000. Future studies might focus on the informal school networks in Khowst, Konar, and Paktya. Does this indicator reflect violent rhetoric presented through informal schools or does this statistic show the lack of central government support to the region in terms of formal schools? This study provides no answer to this question but continued research on these provinces as case studies may prove valuable.

A final area of analysis utilized the Afghan statistics for radios in households and women listening to radios.<sup>40</sup> The percentage of households with radios provided another

method for predicting economic prosperity. Owning a radio requires sufficient wealth beyond simple food and shelter. A sixth and final new hypothesis was: *As the percentage of homes with radios increases, the violence rate against NGO's decreases.*

A linear regression between the independent variable, homeradio, and the dependent variable, Sec100k, displayed the strongest linear relationship. The F-statistic and p-value (0.038) suggested a significant relationship



between the two variables and the R-square value (0.135) showed that home radio density explained about 13.5% of the variation in violence rate. However, this relationship was not negative as stated in the hypothesis. According to the regression analysis, as the percentage of homes with radios increases, the violence rate against NGO's increases. Based on the assumed economic prosperity logic, Afghans become more violent with increased economic capacity. This does not seem logical.

The author believes that the percentage of radios by province indicated not economic prosperity but some other variable. An often promoted belief contends that radical Islamic teachings, transmitted by radio, fuel violence against US military and pro-government elements. The Afghanistan country director for CARE International, Paul Barker, said he is, "not aware of commercial radio frequencies being used to spur anti-foreign and anti-government sentiments."<sup>41</sup> During a presentation of these findings, an Afghan woman and graduate student confirmed the opinions of Barker. She did not believe radio programming fueled violence.<sup>42</sup> The best explanation of this variable came from a Pakistani military officer. He claimed the US military gives radios to local people in dangerous provinces as part of their reconstruction efforts.<sup>43</sup> The radio variable may forecast where the US military believes the most dangerous regions are. The US military PRT's and civil affairs units might hand out the greatest number of radios in the most violent regions of the country. If this is true, the density of radios indicates threat to NGO's and not necessarily economic prosperity. This hypothesis needs further research.

### **Modeling the Violence Rate Against NGO's**

The next step in this study was creation of a model using all the independent variables available to predict the rate of violence against NGO's. The multiple regression analysis included all variables from the initial hypotheses (Distance, US military, Warlord, Poppy) and added some variables created after key informant interviews. Specifically, the model included the variables for border with Pakistan (BorderPak), learning spaces per 100,000 population (Learnspac100k), percentage of homes with radio (Homeradio), and the inverse of the percentage of the population requiring food aid (Inversefoodaidper).<sup>44</sup> Using a stepwise analysis of these nine variables, the multiple regression produced only three significant variables; BorderPak, Poppy, and Homeradio. All other variables became insignificant when combined. The F-test statistic (10.808) for this multiple regression proved to be very significant (p-value = 0.000). The individual t-test for the three remaining variables confirmed the strength of this model. All t-tests showed high significance (All are less than or equal to a p-value of 0.012).

The multiple regression model returned an adjusted R-square far higher than any of the simple linear regression models. When combined, these three variables explain roughly 54% of the variation in violence rate against NGO's (Adjusted R-square = 0.541). The equation for this model is:

$$\text{Sec100k} = -1.384 + 1.691 * \text{BorderPak} + -0.00011 * \text{Poppy} + 0.036 * \text{Homeradio}$$

This equation provided some interesting results. If a province borders Pakistan, it will have about 1.7 more NGO security incidents per 100,000 people. This is a significant amount of variation when compared with the average rate of violence for Afghan provinces, which was 1.02 incidents per 100,000 residents. The poppy variable changed from an insignificant relationship in a simple linear regression to a significant

variable in the presence of the other two remaining variables. The inclusion of other variables increased the strength of the relationship between poppy and the violence rate. Poppy cultivation seemed to have the opposite relationship from expectations in initial hypotheses. According to these calculations, poppy cultivation decreased the number of NGO security incidents. For every additional 1000 hectares of poppy cultivation, the rate of violence against NGO's decreased by 0.1 incident per 100,000 population. This may appear insignificant unless compared with poppy cultivation data in Afghanistan. During 2003, the average poppy cultivation by province was over 3,000 hectares and reached almost 19,000 hectares in Nangarhar province. Using the extreme case of Nangarhar poppy cultivation, the predicted result on the violence rate would be a decrease of 1.9 incidents per 100,000 population. Looking back at the maps of poppy cultivation by province (Map 5) and NGO security incidents (Map 1), there was a notable difference in the Nangarhar province. It lies in the middle of the most violent provinces and recognized outliers in several scatterplots (Khost, Konar, Paktya). However, Nangarhar maintained a lower level of violence compared with surrounding provinces and produced a far larger poppy crop. The Nangarhar province may be another excellent opportunity for a case study on the influence of poppy cultivation.

The results of poppy cultivation in the multiple regression model suggested this cash crop might stabilize a region. The decrease in security incidents may occur for several reasons. First, increased poppy cultivation might signal increased prosperity to those farmers producing it. With additional income, these farmers exert less violence on NGO workers in the province. A second reason may be that poppy cultivation reflects strong warlord control. Because the warlord maintains a strong grasp on power, the production of poppy cultivation can occur. This phenomenon occurs often in regular business models. Companies will not establish production facilities where there is high risk that security issues will threaten their profits. Paul Barker also mentioned this reason for a decrease in security incidents. He said by e-mail, "perhaps there is a desire of narco-interests not to unnecessarily draw attention and threats to their crops."<sup>45</sup> A third argument focuses on the relationship between NGO's and local farmers. Because NGO's provide fertilizers and equipment that may be used for poppy cultivation, the farmers see NGO's as 'friends' and refrain from attacking them. All of these theories need further research and cannot be assumed strictly from the statistical results of this multiple regression.

The variable representing the percentage of homes with a radio remained significant in a multiple regression. However, the relationship displayed a positive correlation with violence rate. For every additional percentage of homes with a radio, there is a corresponding increase in the violence rate of 0.036 incidents per 100,000 people. Because the average violence rate is 1.02 incidents, the home radio variable can account for significant variation since the standard deviation from the mean for this indicator was almost 14%. A change of this magnitude can raise the predicted rate of security incidents by almost one incident per 100,000 people. As mentioned before, home radio ownership does not necessarily indicate extremist propaganda or increased economic prosperity. But, it could predict where the US military concentrates its efforts against violent factions.

### **Weaknesses in Statistical Arguments**

Statistical studies of security in Afghanistan remain difficult but will become easier with time. This study attempted to measure variables, such as ethnicity, that cannot be quantified based on current data. However, continued progress by the ACSO may make hypothesis testing on ethnicity and economic prosperity easier in the future. Since presentation of the initial data analysis, misinterpretation of the dependent variable occurred frequently. This study attempted to measure variation in *the violence rate against NGO's*. It *does not* reflect the overall security level in each province. The NGO security incidents do not represent attacks or violence in any form other than against NGO's. Some provinces may have high rates of crime that do not result in corresponding increase in violence against NGO workers.

The findings in this study provide a good base for future research but are not all encompassing. The adjusted R-square value of 0.54 indicates that almost half of the variation in violence rate cannot be accounted for by this study. The hypotheses on ethnicity, warlord control, and follow on discussion of economic prosperity never came to fruition based on this study's provincial case structure. The author suspects these variables might play a large role in the variation not captured by this model. Another important note is the limited number of data points. During the period of analysis, Afghanistan consisted of only 32 provinces. Final correlations from the multiple regression resulted in only 26 cases being tested because of absent data for poppy cultivation and food aid. As statistics become available, a better method for analysis will be the districts of Afghanistan. This will increase the number of cases and provide a more reliable model. Lastly, this study focused strictly on the time period of 1 January 2003 to 15 March 2004. This study utilized this time period because of lack of access to more comprehensive information and limited time for research. (10 weeks) With additional time, the author hopes to expand this study through the rest of 2004. Paul Barker suggested other trends in violence will emerge with an expanded timeframe. Several incidents in Baghlan and Badakhshan provinces could alter the results of this finding.<sup>46</sup>

### **Conclusions from Data Analysis and Interviews**

The results of statistical analysis differed considerably from the predicted results of the initial hypothesis. The first conclusion from this study asserts that violence against NGO workers depends more on the specific province of the incident than the distance from Kabul. Those areas along the Afghanistan-Pakistan border harbor many of the former Taliban and Al Qaeda fighters. Provinces such as Paktya, Khost, Kandahar and Kunar have continued fighting between warlords, former Taliban, foreign fighters and the US military.<sup>47</sup> This fighting creates spillover effects which increase violence against NGO's.

Interviews and data analysis do not suggest that the US military creates more violence against NGO's. As confirmed in interviews, the US military locates in many of the most dangerous provinces. Logic suggests these provinces will be the most dangerous locations for NGO workers as well as military units. With all factors combined, the presence of US military forces became insignificant in relation to the NGO violence rate.

Afghan citizens often associate NGO workers as part of the US military. Paul Barker of CARE International noted this problem in the south and east of Afghanistan. He noted, “it is the very clear view of NGO’s that we are more secure if we are not seen to have any association with the military in the south and east...in the north and center, association is not seen as so detrimental to our security, although it isn’t seen to help much.”<sup>48</sup> US Army officers agreed with this observation. They believe Afghans see no separation between the military and NGO workers.

Two changes might improve the safety of NGO’s. One, NGO’s should not only distance themselves from military bases but should also alter their appearance from that of US military and government agencies. A different dress, increased incorporation of local Afghans and utilization of vehicles and equipment different from the US military would reinforce the separation between NGO worker and soldier. Two, ending the use of PRT’s will probably decrease the violence against NGO’s. PRT’s blur the line between NGO workers and the military. PRT’s draw violence from hostile factions in the most violent provinces. Additionally, these soldiers often receive little or no training in development work. Their expertise lies in security and military operations. These missions will always be higher in priority than development work.<sup>49</sup>

Based solely on the results of this finding, poppy cultivation represents a stabilizing effect on security. Successful cultivation requires a stable environment from which a warlord or farmers may profit. Ironically, one of the stated top priorities for President Hamid Karzai’s new regime is eradication of poppy cultivation and opium production in an attempt to stop the increasing power of drug lords.<sup>50</sup> At the same time, a recent New York Times article states US military assessments report, “attacks on allied forces have declined, the power of regional warlords has diminished, militias are being disarmed, a moderate Islamic Constitution is in place, and the elections on Oct. 9 were conducted with relatively little violence and few irregularities.”<sup>51</sup> If narco-trafficking is such a large problem, how can the number of attacks against US forces and the power of local warlords decrease? One must wonder if the poppy cultivation is truly a problem for Afghanistan. The focus on poppy cultivation appears politically motivated by the US, EU and Russia. These areas, specifically the EU and Russia, are the recipients of the increased heroin supply. An international aid worker in Afghanistan commented, “there will be a much greater focus on eradication in 2005 than ever before, driven to a large extent by US pressure.”<sup>52</sup>

The Afghan government and US military should reevaluate the immediate eradication of poppy cultivation. Currently, poppy cultivation accounts for roughly half of Afghanistan’s GDP.<sup>53</sup> Eradication without complementary development will result in increased violence against aid workers. Afghanistan should not remove the poppy cultivation without an alternative economic development plan. Ashraf Ghani, the Finance Minister of Afghanistan understands this situation. In a New York Times Op-ed article, Ghani explains that Afghanistan needs, “an agricultural strategy that links farming households to domestic and international markets. With grain worth so little in comparison to opium, and agricultural productivity in Afghanistan only one-eighth that of middle-income countries, a short-term plan to substitute wheat for poppy will not work.”<sup>54</sup> In 2005, NGO workers will be particularly vulnerable in those provinces targeted for eradication.

Warlords remain a problem that must be solved in one of two ways. One option is to completely overpower them with the ANA and US military forces. This will likely prove difficult and may create stronger resistance against the central government. A second option is bringing them into the political process. The actions of Ismail Khan in Herat and Dostum in Mazar-i-Sharif suggest this is a possibility. The transition of militias toward government encourages a more peaceful solution to the warlord problem. Recent ACBAR reports cite the disarmament of local militias.<sup>55</sup> These actions are positive signs that the latter option may succeed.

In many ways, statistical analysis of NGO insecurity brings forth more questions than it answers. Future areas of study might focus on a variety of issues. Comparative case studies of the eastern provinces of Kunar, Nangarhar, Paktya, Khost and Paktika might identify more specific causes for an increase in violence against NGO's. These provinces behave differently from most other provinces in Afghanistan. Badakhshan is another province with a unique set of circumstances. As the northeastern province bordering three separate countries, it maintained one of the highest levels of poppy cultivation in 2003. A study focusing strictly on economic development in Afghanistan and its correlation with the rate of violence against NGO's may prove valuable. Almost half of the variation in NGO violence rate is not accounted for by the model created in this paper. The economic capacity of the provinces might explain this variation. Lastly, a future study of the statistic for percentage of homes with radios could provide interesting results. Research from this study suggests several hypotheses for the positive relationship between this variable and the rate of violence. These hypotheses need comprehensive analysis.

### **An Integrated Strategy of Security and Development**

The US government, and to a lesser extent NGO's and the Afghan government, do not understand that the long-term solution is the short-term solution. Only a coordinated effort on the part of all actors to improve the security, economy, and the government capacity of Afghanistan will result in a stable nation. NGO's and the US military pursue separate short-term plans which do little to improve the future outlook of Afghanistan. From the results of this paper, the security and development strategy of Afghanistan should follow three principles. One, the military should focus on security and the NGO's should concentrate on development. NGO's have the necessary skills and personnel to rebuild Afghanistan's infrastructure and economy. Any money used by NGO's for private security displays inefficiency and waste of precious resources. Likewise, the US military must focus strictly on security issues and abandon reconstruction tasks. The military holds the comparative advantage in security, and the NGO's maintain the comparative advantage in development work. Both should stick with what they are good at.

Two, NGO's should work closely with the ANA to provide aid outside of Kabul.<sup>56</sup> This coordination will put an Afghan face on development work and reduce violence against NGO's. This aid work will appear as an extension of support from the central government and strengthen the credibility of the Karzai government. Additionally, this structure will remove the US military shadow from NGO workers.

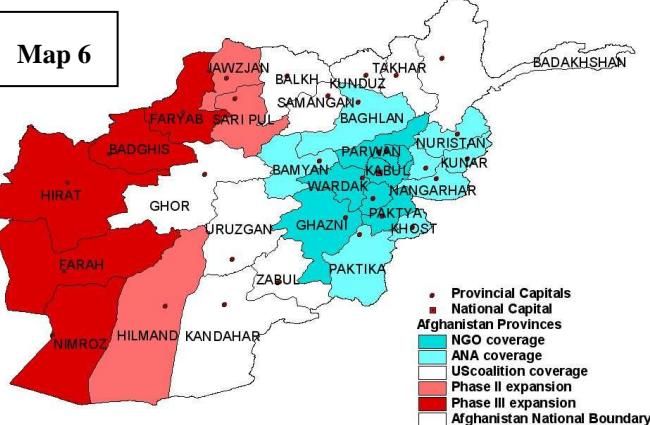
Three, the US military should shift their mission focus from chasing bin Laden to economic development protection. Currently, the US government spends between \$10

billion and \$12 billion on military operations in Afghanistan each year. This is roughly three times the amount spent on development aid.<sup>57</sup> The military strategy for Afghanistan remains largely unfocused and relatively unchanged since 2001. Instead of conducting an endless string of repeated raids along the Afghanistan-Pakistan border, the US military may want to concentrate its efforts on protection of economic and infrastructure development programs. Simply catching bin Laden will not end the era of terrorism in Afghanistan. Nothing short of complete economic and government reconstruction will win the Afghanistan battle in the war on terror. Protecting NGO operations will lead to a sustainable democracy in Afghanistan and will likely finish bin Laden and his terror networks.

A coordinated security and development strategy could utilize an expanding cordon approach. The US military, acting as the security force, would form the outer cordon and coordinate the inner security turnover with the ANA (see Map 6) . This

provides mutual support between these two security elements. Next, the ANA provides security for the inner core of NGO workers. This puts responsibility for NGO security on the ANA, provides a distinct separation between the US military and NGO's, and places an Afghan face on development successes. The cordons would continue to expand out from the center over a specified period of time. Transition and integration of these elements must occur

## Strategy Option- Integrated Expansion from Kabul



through collaborative planning on the part of all parties but must ultimately be under the direction of the Afghan central government. Map 6 shows one option for implementation of this concept. Depending on available resources, another option might be expansion from several cities simultaneously (Herat, Mazar-i-Sharif, Kandahar). A third strategy may seek to develop from the major roads between cities outward to more remote areas. This would better protect vital infrastructure and free the movement of goods throughout the country.

The purpose of the above strategy proposal is to emphasize the need for coordinated development involving all actors. NGO projects are the main effort in securing a stable Afghanistan. All participants in Afghanistan should realize their importance and make it a priority to protect their existence.

**APPENDIX A:**

**POLICY ANALYSIS WORKSHEET  
AND ANSO CHART**

CASES	Independent Variables					
	Distance (km)	Province capital	ProvAfgBor	BorderPak	Foodpop#	Percpopfood
Badakhshan	370	Fayzabad	Yes	Yes	200000	24
Badghis	712	Qaleh-ye Now	Yes	No	75000	19
Baghlan	170	Pol-e Khomri	No	No	110000	13
Balkh	352	Mazar-e Sharif	Yes	No	140000	13
Bamyan	196	Bamian	No	No	160000	34
Farah	788	Farah	Yes	No	80000	14
Faryab	647	Meymaneh	Yes	No	200000	21
Ghazni	109	Ghazni	No	No	260000	24
Ghowr	415	Chagcharan	No	No	180000	31
Hilmand	547	Lashkar Gah	Yes	Yes	65000	7
Herat	695	Herat	Yes	No	80000	7
Jowzjan	482	Sheberghan	Yes	No	140000	27
Kabul	0	Kabul	No	No	120000	4
Kandahar	423	Kandahar	Yes	Yes	170000	15
Kapisa	75	Mahmud-i-Raqi	No	No	110000	19
Khost	170	Khost	Yes	Yes	N/A	N/A
Kunar	191	Asadabad	Yes	Yes	4000	1
Kondoz	288	Kunduz	Yes	No	40000	4
Laghman	140	Mehtar Lam	No	No	27000	5
Logar	67	Pol-e Alam	No	No	N/A	N/A
Nangarhar	120	Jalalabad	Yes	Yes	81000	6
Nimroz	838	Zaranj	Yes	Yes	25000	14
Nurestan	170	Nuerstan-Lokhar	Yes	Yes	N/A	N/A
Uruzgan	459	Tarin Kowt	No	No	343000	46
Paktya	93	Gardiz	Yes	Yes	55000	11
Paktika	171	Sharan	Yes	Yes	58000	12
Parwan	47	Charikat	No	No	80000	12
Samangan	244	Samangan	Yes	No	60000	13
Sari Pul	517	Sar-e-Pol	No	No	100000	18
Takhar	272	Taloqan	Yes	No	30000	3
Wardak	24	Meydan Shahr	No	No	80000	16
Zabol	309	Qalat	Yes	Yes	70000	23

Independent Variables						
<i>Cerealalloc</i>	<i>LearnSpa#</i>	<i>Formscho</i>	<i>Inform scho</i>	<i>Home radio</i>	<i>US Military</i>	<i>Warlords</i>
15000	328	324	4	52.7	No	Daoud
5625	73	73	0	52	No	Khan
8250	120	115	5	49.4	No	Daoud
10500	305	255	50	63	No	Dostum
12000	188	152	36	48.4	Yes	Khalili
6000	140	62	78	57.4	NO	Khan
15000	173	173	0	50	NO	Dostum
19500	365	161	204	75.4	Yes	Vacuum
13500	176	175	1	42.8	No	Vacuum
4875	186	167	19	81.3	Yes	Akhundzada
6000	329	294	35	68.1	No	Khan
10500	217	135	82	51	No	Dostum
9000	372	307	65	78.6	No	Karzai
12750	209	204	5	84.7	Yes	Sherzai
8250	101	98	3	72.2	Yes	Fahim
N/A	240	96	144	62.7	Yes	Sayyaf
300	419	131	288	61.7	Yes	Hazrat Ali
3000	174	164	10	45.8	No	Daoud
2025	223	93	130	68.5	Yes	Vacuum
N/A	200	100	100	73.9	Yes	Karzai
6075	437	264	173	79.7	Yes	Vacuum
1875	51	35	16	43.3	Yes	Khan
N/A	129	46	83	47.3	Yes	Hazrat Ali
25725	89	63	26	61.7	Yes	Vacuum
4125	165	81	84	76.4	Yes	Vacuum
4350	242	85	157	76	Yes	Vacuum
6000	281	255	26	63.4	Yes	Vacuum
4500	150	51	99	42.4	No	Vacuum
7500	194	187	7	46.1	No	Dostum
2250	209	201	8	58.4	No	Daoud
6000	281	102	179	76.6	Yes	Vacuum
5250	121	117	4	78.8	Yes	Vacuum

Dependent Variable				
<i>WarlordYN</i>	<i>Poppy</i>	Security	Population	Sec100k
1	12756	5	715000	0.699301
1	170	2	301000	0.664452
0	597	4	745000	0.536913
1	1108	17	869000	1.956272
1	610	0	356000	0
1	1700	4	338000	1.183432
1	766	3	782000	0.383632
0	NS	6	931000	0.644468
0	3782	0	485000	0
1	15371	5	745000	0.671141
1	134	18	1182000	1.522843
1	888	0	441000	0
0	237	19	3314000	0.573325
1	3055	30	886000	3.386005
0	326	1	360000	0.277778
1	375	16	300000	5.333333
1	2025	13	321000	4.049844
1	49	5	820000	0.609756
0	1907	1	373000	0.268097
1	NS	2	292000	0.684932
0	18904	15	1089000	1.37741
1	26	0	149000	0
1	648	1	112000	0.892857
0	7143	6	627000	0.956938
0	721	17	415000	4.096386
0	NS	1	352000	0.284091
0	NS	0	726000	0
0	101	0	378000	0
1	1428	0	468000	0
1	380	4	750000	0.533333
0	2735	2	413000	0.484262
0	2541	6	258000	2.325581

## **APPENDIX B:**

### **RESULTS OF STATISTICAL ANALYSIS**

### **List of variables and sources of origin**

1. Sec# -Acts of violence against NGO workers in Afghanistan
2. Distance- Number of kilometers from each provincial capital to the national capital of Kabul.  
Source: International Travel Maps: Afghanistan 1: 1,000,000
3. US Military- Presence of US military forces in each province of Afghanistan  
Source: Websource- Global Security.org  
Interviews with source 2-IA and 2-VR
4. WarlordYN- One warlord controls the province (Yes/No)  
Source: Websource- Global Security.org  
CDI Terrorism Project, “Afghanistan: A Return to Warlordism?”
5. Poppy- The number of hectares of poppy cultivation in 2003  
Source: UNODC Afghanistan Opium Survey 2003
6. ProvAfgBor-Does the province share a boundary with Afghanistan border?(Yes/No)  
Source: Afghanistan Information Management System shapefile
7. BorderPak- Does the province share a boundary with Pakistan? (Yes/No)  
Source: Afghanistan Information Management System shapefile
8. Foodpop#- Beneficiary population of food aid by province (number) 2002-2003  
Source: Central Statistics Office, Afghan National Government
9. Percpopfood- Percentage of provincial population needing food aid (%) 2002-2003  
Source: Central Statistics Office, Afghan National Government
10. Cerealalloc- Cereal allocation in tons by province  
Source: Central Statistics Office, Afghan National Government
11. Learnspa#- Total number of learning spaces by province  
Source: Central Statistics Office, Afghan National Government
12. Formscho- Number of formal schools by province  
Source: Central Statistics Office, Afghan National Government
13. Informscho- Number of informal schools by province  
Source: Central Statistics Office, Afghan National Government
14. Homeradio- Percentage of Afghan households with a radio by province  
Source: Central Statistics Office, Afghan National Government
15. Sec100k- Number of security incidents per 100,000 population in province

## Regression for Independent Variable One-Distance from Kabul

### Research Question:

Is there a relationship between and Distance from each provincial capital to Kabul and the rate of violence against NGO's?

### Method:

We will create a scatter plot and of the data and then find the best fit line to model the data. Using SPSS, we will create a linear regression model.

Null Hypothesis:

$H_0$ : There is no linear model that explains the linear relationship between the 2 variables.

## SPSS Output

### Descriptive Statistics

	Mean	Std. Deviation	N
Sec100k	1.074886	1.354014469	32
Distance	315.66	236.575	32

### Correlations

	Sec100k	Distance
Pearson Correlation	1.000	-.122
Distance	-.122	1.000
Sig. (1-tailed)		
Sec100k	.	.252
Distance	.252	.
N	32	32
Distance	32	32

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.122 <sup>a</sup>	.015	-.018	1.366041797	.015	.457	1	30	.504

a. Predictors: (Constant), Distance

b. Dependent Variable: Sec100k

### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.852	1	.852	.457	.504 <sup>a</sup>
	Residual	55.982	30	1.866		
	Total	56.834	31			

a. Predictors: (Constant), Distance

b. Dependent Variable: Sec100k

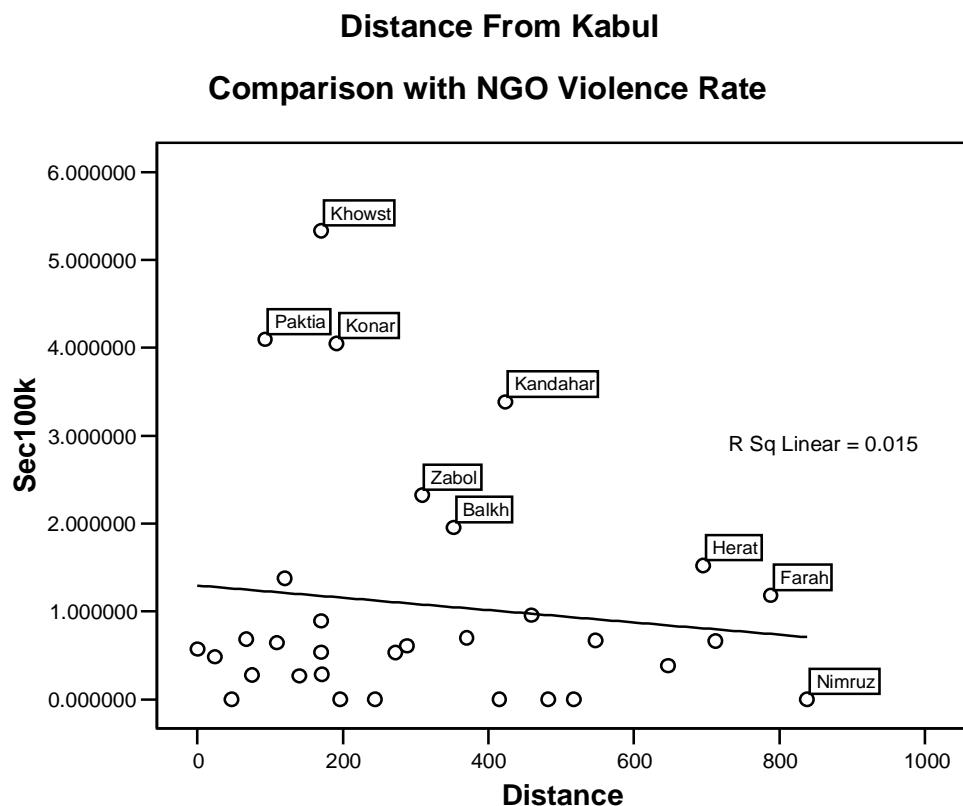
Model	Coefficients <sup>a</sup>						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.296	.407	3.186	.003	1.000	1.000
	Distance	-.001	.001	-.122	-.676	.504	

a. Dependent Variable: Sec100k

### Analysis:

In the ANOVA table, we find the F-value (0.457) and its probability level (Sig. of 0.504). Because the significance of 0.504 > 0.10, we fail to reject the null hypothesis that there is no linear relationship between Distance of provincial capital to Kabul and the number of NGO security incidents per 100K people.

There is no relationship between the independent (Distance) and the dependent variable (Sec100k). The R-square of 0.015 and adjusted R-square value of -0.018 indicates that the relationship is non-existent. This can be seen as well by looking at the scatter plot and the best fit line. The cases show a large variance from the best fit line. Important to note are the provinces of Khowst, Paktia, Konar and Kandahar which all lie far from the best fit line. These strong outliers will be important in analysis of a new independent variable that may better explain the relationship of NGO violence and distance from Kabul. All four of these provinces border Pakistan.



## Independent T-test for Independent Variable Two-US Military

### Research Question:

Is there any difference in violence rate against NGO's between provinces with US military presence and provinces without US military presence?

### Method:

Using SPSS, we will run an independent T-test because we have one metric variable and one categorical (dichotomous variable)

Null Hypothesis:

$H_0$ : There is no difference in rate of violence against NGOs between provinces with US military and those provinces without US military presence?

**Group Statistics**

USmilitary	N	Mean	Std. Deviation	Std. Error Mean
Sec100k Yes	20	1.421970	1.575943259	.352391626
Sec100k No	12	.49641450	.541107780	.156204361

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
								Lower	Upper	
Sec100k	Equal variances assumed	8.811	.006	1.955	30	.060	.92555502	.47332920	-.04111217	1.89222215
Sec100k	Equal variances not assumed			2.401	25.500	.024	.92555502	.38546032	.132472578	1.718637470

### Analysis:

Looking at the F-test for equality of variances shows a F-ratio of 8.811 with a significance of 0.006. The probability of the two group having equal variance is very low. Therefore, we reject the null hypothesis that there is no difference in the violence level between provinces with US military presence and provinces without military presence. Using the Unequal Variances model, we also reject the null hypothesis because the t-value of 2.401 is significant. (2-tail test where  $.024 < 0.10$ ) Though this does not disprove the argument that US military presence increases violence, this variable later proves to be insignificant when combined with other factors.

## Independent T-test for Independent Variable Three- Warlords

### Research Question:

Is there any difference in violence rate against NGO's between provinces with one warlord largely in power and provinces with multiple warlords or a vacuum of power?

### Method:

Using SPSS, we will run an independent T-test because we have one metric variable and one categorical (dichotomous variable)

Null Hypothesis:

$H_0$ : There is no difference in rate of violence against NGOs between provinces with one warlord in power and those provinces with a power vacuum?

**Group Statistics**

WarlordYN	N	Mean	Std. Deviation	Std. Error Mean
Sec100k Yes	18	1.253951	1.514728848	.357025013
Sec100k No	14	.84466046	1.126940765	.301187588

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Sec100k	Equal variances assumed	1.090	.305	.844	30	.405	.40929054	.48475074	-.580702548 1.399283632
Sec100k	Equal variances not assumed			.876	29.962	.388	.40929054	.46709830	-.544701684 1.363282768

### Analysis:

Looking at the F-test for equality of variances shows a F-ratio of 1.09 with a significance of 0.305. Therefore, we fail to reject the null hypothesis that there is no difference in the violence level between provinces with one warlord in power and provinces without a strong warlord presence. Using the Unequal Variances model, we also fail to reject the null hypothesis because the t-value of 0.876 is not significant. (2-tail test where  $0.388 > 0.10$ ) The difference in warlord power and influence is difficult to measure. Some warlords are more supportive of NGO's than others. Additionally, it is difficult to measure the level of control each warlord has within the province. A categorical (yes/no) variable does not effectively measure the power of warlords. Additionally, some warlords region of control is not limited to provincial borders nor does it always encompass an entire province. The effects of warlords on the security of NGO's may be captured better with other variables such as poppy cultivation.

## Regression for Independent Variable Four-Poppy Cultivation

### **Research Question:**

Is there a relationship between Poppy cultivation in hectares and the rate of violence against NGO's?

### **Method:**

We will create a scatter plot and of the data and then find the best fit line to model the data. Using SPSS, we will create a linear regression model.

Null Hypothesis:

$H_0$ : There is no linear model that explains the linear relationship between the 2 variables.

### **SPSS Output**

#### **Descriptive Statistics**

	Mean	Std. Deviation	N
Sec100k	1.170816 98	1.420201744	28
Poppy	2874.39	4834.467	28

#### **Correlations**

		Sec100k	Poppy
Pearson Correlation	Sec100k	1.000	-.026
	Poppy	-.026	1.000
Sig. (1-tailed)	Sec100k	.	.449
	Poppy	.449	.
N	Sec100k	28	28
	Poppy	28	28

#### **Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.026 <sup>a</sup>	.001	-.038	1.446784760	.001	.017	1	26	.897

a. Predictors: (Constant), Poppy

b. Dependent Variable: Sec100k

#### **ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.035	1	.035	.017	.897 <sup>a</sup>
	Residual	54.423	26	2.093		
	Total	54.458	27			

a. Predictors: (Constant), Poppy

b. Dependent Variable: Sec100k

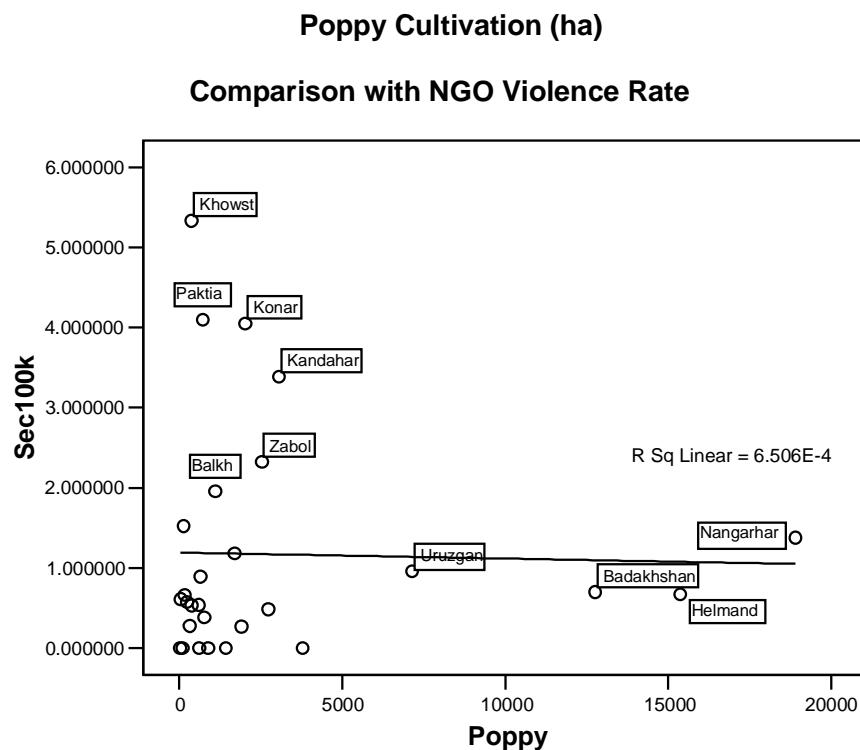
Model	Coefficients <sup>a</sup>						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.192	.320	3.730	.001	1.000	1.000
	Poppy	.000	.000	-.026	-.130	.897	

a. Dependent Variable: Sec100k

### Analysis:

In the ANOVA table, we find the F-value (0.017) and its probability level (Sig. of 0.897). With a p-value of  $0.897 > 0.10$ , we fail to reject the null hypothesis that there is no linear relationship between Poppy cultivation in hectares and the number of NGO security incidents per 100K people.

There is no relationship between the independent (Poppy) and the dependent variable (Sec100k). The R-square of 0.001 and adjusted R-square value of -0.038 indicates that the relationship is non-existent. This can be seen as well by looking at the scatter plot and the best fit line. The cases show a large variance from the best fit line. Important to note again are the provinces of Khowst, Paktia, Konar and Kandahar which all lie far from the best fit line. These strong outliers will be important in analysis of a new independent variable that may better explain the relationship of NGO violence and distance from Kabul. All four of these provinces border Pakistan. Additionally, the significance of Poppy cultivation will change when this variable is included in a multiple regression model.



## Independent T-Test for Independent Variable Five: ProvAfgBor

### Research Question:

Is there any difference in violence rate against NGO's between provinces sharing a boundary with the Afghan border and provinces having no boundary shared with the national border?

### Method:

Using SPSS, we will run an independent T-test because we have one metric variable and one categorical (dichotomous variable)

Null Hypothesis:

$H_0$ : There is no difference in rate of violence against NGOs between provinces lying on the Afghanistan border and those provinces not on the Afghanistan border?

**Group Statistics**

ProvAfgBor		N	Mean	Std. Deviation	Std. Error Mean
Sec100k	Yes	20	1.498483	1.557603843	.348290807
	No	12	.36889254	.325819434	.094055969

**Independent Samples Test**

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Sec100k	Equal variances assumed	11.936	.002	2.465	30	.020	1.1295902	.45832645	.193562665
				3.131	21.673	.005	1.1295902	.36076725	.380749992

### Analysis:

Looking at the F-test for equality of variances shows a F-ratio of 11.9 with a significance of 0.002. With a p-value of  $0.002 < 0.10$ , we reject the null hypothesis that there is no difference in the violence level between provinces with a boundary on the national border and provinces without a boundary on the national border. Using the Unequal Variances model, we also reject the null hypothesis because the t-value of 3.131 is significant. (2-tail test where  $0.005 < 0.10$ ) The difference in violence rate between these two types of provinces suggests there might be some influences outside the Afghanistan borders that increases the rate of violence against NGO's.

## Independent T-Test for Independent Variable Six: BorderPak

### Research Question:

Is there any difference in violence rate against NGO's between provinces bordering Pakistan and provinces that do not share a border with Pakistan?

### Method:

Using SPSS, we will run an independent T-test because we have one metric variable and one categorical (dichotomous variable)

Null Hypothesis:

$H_0$ : There is no difference in rate of violence against NGOs between provinces on the Pakistan border and those provinces not on the Pakistan border?

**Group Statistics**

BorderPak		N	Mean	Std. Deviation	Std. Error Mean
Sec100k	Yes	11	2.101450	1.834039792	.552983804
	No	21	.53716283	.525963924	.114774738

**Independent Samples Test**

	Levene's Test for Equality of Variances	t-test for Equality of Means							95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	
									.695731117	2.432842303
Sec100k	Equal variances assumed	35.700	.000	3.678	30	.001	1.5642867	.42528880	.319422539	2.809150882
	Equal variances not assumed			2.770	10.870	.018	1.5642867	.56476927		

### Analysis:

Looking at the F-test for equality of variances shows a F-ratio of 35.7 with a significance of 0.000. With a p-value of  $0.000 < 0.10$ , we reject the null hypothesis that there is no difference in the violence level between provinces sharing a border with Pakistan and provinces not sharing a border with Pakistan. Using the Unequal Variances model, we also reject the null hypothesis because the t-value of 2.77 is significant. (2-tail test where  $0.018 < 0.10$ ) The mean rate of violence against NGO's in provinces bordering Pakistan is almost four times the rate of provinces that do not share a border with Pakistan. These provinces are where many of the former Taliban members and Al Qaeda continue to operate.

## Regression for Independent Variable Seven: PercentPopfood

### Research Question:

Is there a relationship between the percentage of the provincial population needing food aid and the rate of violence against NGO's?

### Method:

We will create a scatter plot and of the data and then find the best fit line to model the data. Using SPSS, we will create a linear regression model.

Null Hypothesis:

$H_0$ : There is no linear model that explains the linear relationship between the 2 variables.

**Descriptive Statistics**

	Mean	Std. Deviation	N
Sec100k	.94776701	1.165666922	29
Percpopfood	15.72	10.264	29

**Correlations**

		Sec100k	Percpopfood
Pearson Correlation	Sec100k	1.000	-.254
	Percpopfood	-.254	1.000
Sig. (1-tailed)	Sec100k	.	.092
	Percpopfood	.092	.
N	Sec100k	29	29
	Percpopfood	29	29

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.254 <sup>a</sup>	.065	.030	1.148087059	.065	1.864	1	27	.183

a. Predictors: (Constant), Percpopfood

b. Dependent Variable: Sec100k

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.457	1	2.457	1.864	.183 <sup>a</sup>
	Residual	35.589	27	1.318		
	Total	38.046	28			

a. Predictors: (Constant), Percpopfood

b. Dependent Variable: Sec100k

Model	Coefficients <sup>a</sup>						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.402	.395	3.549	.001		
	Percpopfood	-.029	.021	-.254	-.1365	.183	1.000

a. Dependent Variable: Sec100k

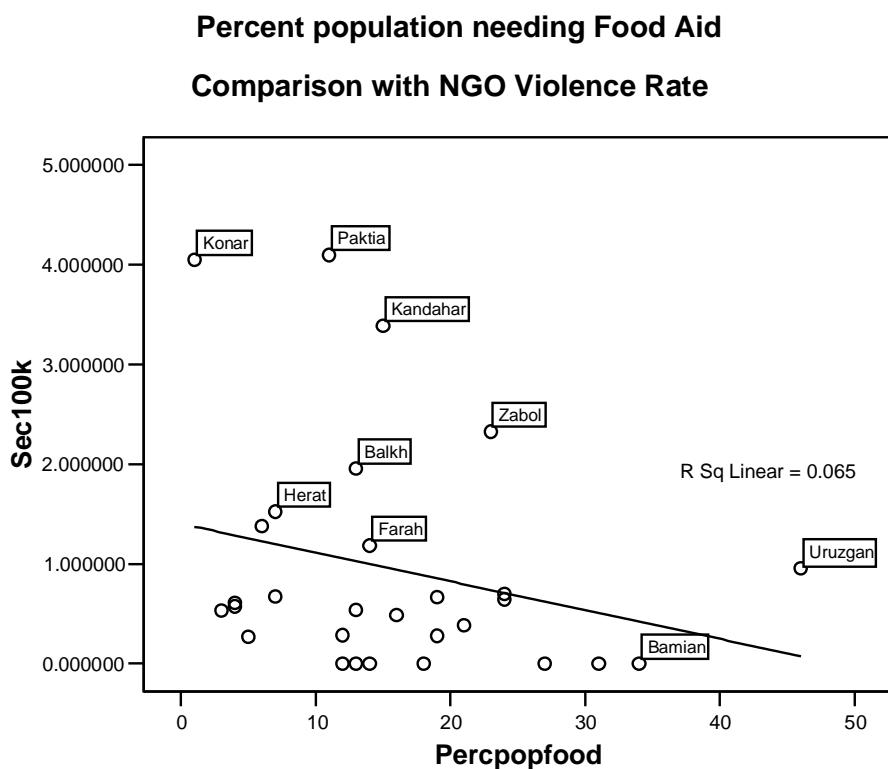
### Analysis:

In the ANOVA table, we find the F-value (1.184) and its probability level (Sig. of 0.183). Using a p-value of 0.183 > 0.10, we fail to reject the null hypothesis that there is no linear relationship between Percent of provincial population needing food aid and the number of NGO security incidents per 100K people.

There is no significant relationship between the independent variable (Percpopfood) and the dependent variable (Sec100k). The R-square of 0.065 and adjusted R-square value of 0.030 indicates that the relationship is non-existent. This can be seen as well by looking at the scatter plot and the best fit line. The cases show a large variance from the best fit line. Important to note again are the provinces of Paktia, Konar and Kandahar which all lie far from the best fit line.

The equation for **Sec100K** as a function of **Percpopfood** is:

$$\text{Sec100K} = 1.402 - 0.029 * \text{Percpopfood}$$



## Regression for Independent Variable Eight: Learnspac100k

### Research Question:

Is there a relationship between the number of learning spaces per 100,000 population in the province and the rate of violence against NGO's?

### Method:

We will create a scatter plot and of the data and then find the best fit line to model the data. Using SPSS, we will create a linear regression model.

Null Hypothesis:

$H_0$ : There is no linear model that explains the linear relationship between the 2 variables.

### **Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	Learnspac <sup>a</sup> 100k	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: Sec100k

### **Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.344 <sup>a</sup>	.118	.089	1.292440927	.118	4.024	1	30	.054

- a. Predictors: (Constant), Learnspac100k
- b. Dependent Variable: Sec100k

### **ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.722	1	6.722	4.024	.054 <sup>a</sup>
	Residual	50.112		1.670		
	Total	56.834				

- a. Predictors: (Constant), Learnspac100k
- b. Dependent Variable: Sec100k

### **Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.304	.447	.344	.679	.502
	Learnspac100k	1.746	.871		2.006	.054

- a. Dependent Variable: Sec100k

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.49977255	2.58338833	1.07488639	.465656117	32
Residual	-1.42243040	3.632428408	.000000000	1.271424226	32
Std. Predicted Value	-1.235	3.240	.000	1.000	32
Std. Residual	-1.101	2.811	.000	.984	32

a. Dependent Variable: Sec100k

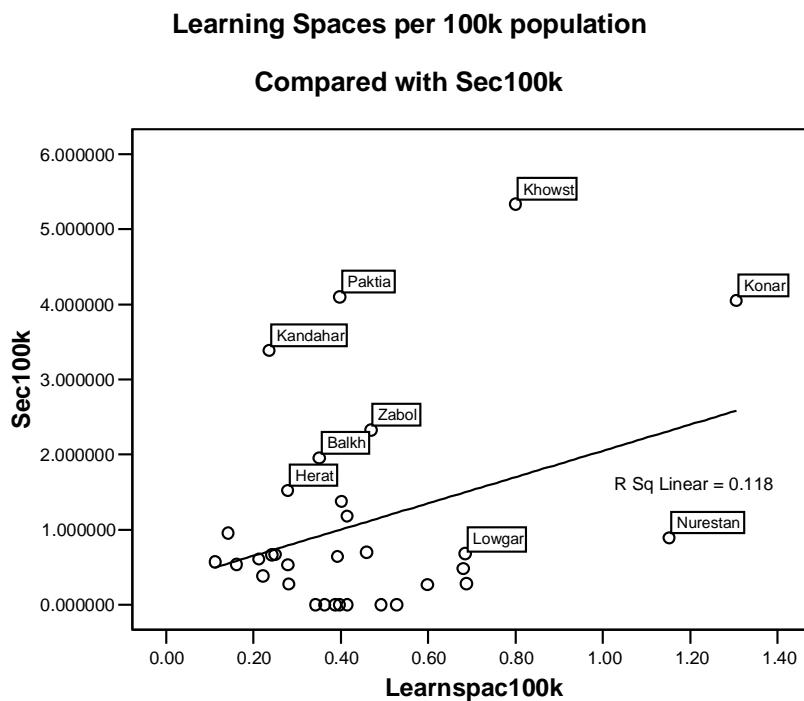
### Analysis:

In the ANOVA table, we find the F-value (4.024) and its probability level (Sig. of 0.054). Using a p-value of  $0.054 < 0.10$ , we reject the null hypothesis that there is no linear relationship between learning spaces per 100,000 population and the number of NGO security incidents per 100K people.

There is a weak positive relationship between the independent (Learnspac100) and the dependent variable (Sec100k). The R-square of 0.118 and adjusted R-square value of 0.089 indicates that the relationship is quite small. This can be seen as well by looking at the scatter plot and the best fit line. The cases of Khowst and Konar show a large variance from the best fit line. An important note is these two provinces have a high ratio of informal to formal schools.

The equation for **Sec100K** as a function of **Learnspac100k** is:

$$\text{Sec100K} = 0.304 + 1.746 * \text{Learnspac100k}$$



## Regression for Independent Variable Nine: Informalschool100k

### Research Question:

Is there a relationship between informal schools per 100,000 population and the rate of violence against NGO's?

### Method:

We will create a scatter plot and of the data and then find the best fit line to model the data. Using SPSS, we will create a linear regression model.

Null Hypothesis:

$H_0$ : There is no linear model that explains the linear relationship between the 2 variables.

### **Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	Informalschool100k <sup>a</sup>	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: Sec100k

### **Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.362 <sup>a</sup>	.131	.102	1.283300822	.131	4.511	1	30	.042

- a. Predictors: (Constant), Informalschool100k
- b. Dependent Variable: Sec100k

### **ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.428	1	7.428	4.511	.042 <sup>a</sup>
	Residual	49.406	30	1.647		
	Total	56.834	31			

- a. Predictors: (Constant), Informalschool100k
- b. Dependent Variable: Sec100k

### **Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Correlations		
		B	Std. Error				Zero-order	Partial	Part
1	(Constant)	.706	.286		2.473	.019			
	Informalschool100k	2.165	1.020	.362	2.124	.042	.362	.362	.362

- a. Dependent Variable: Sec100k

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.70627874	2.6490021	1.07488639	.489508664	32
Residual	-1.4180838	3.5876973	.000000000	1.262432751	32
Std. Predicted Value	-.753	3.216	.000	1.000	32
Std. Residual	-1.105	2.796	.000	.984	32

a. Dependent Variable: Sec100k

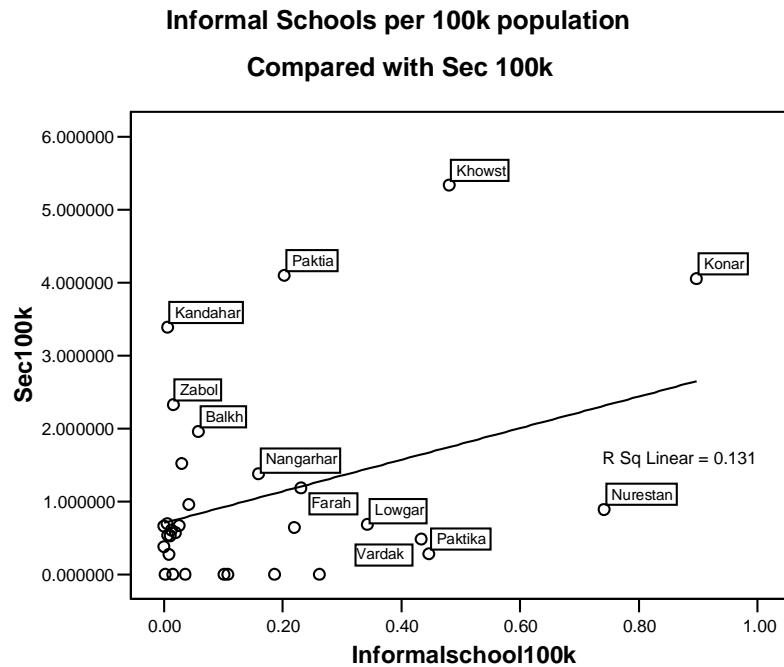
### Analysis:

In the ANOVA table, we find the F-value (4.511) and its probability level (Sig. of 0.042). Using a p-value of 0.042 < 0.10, we reject the null hypothesis that there is no linear relationship between Informal schools per 100K people and the number of NGO security incidents per 100K people.

The R-square of 0.131 and adjusted R-square value of 0.102 indicates a weak positive relationship. This relationship is only slightly stronger than the relationship between learning spaces and Sec100k. This can be seen as well by looking at the scatter plot and the best fit line. Once again, Khowst and Konar are outliers. The high density of informal schools in these provinces may represent some other factor in NGO violence rate.

The equation for **Sec100K** as a function of **Informalschool100k** is:

$$\text{Sec100K} = 0.706 + 2.165 * \text{Informalschool100k}$$



## Regression for Independent Variable Ten- Homeradio

### **Research Question:**

Is there a relationship between the percentage of the provincial population having home radios and the rate of violence against NGO's?

### **Method:**

We will create a scatter plot and of the data and then find the best fit line to model the data. Using SPSS, we will create a linear regression model.

Null Hypothesis:

$H_0$ : There is no linear model that explains the linear relationship between the 2 variables

**Descriptive Statistics**

	Mean	Std. Deviation	N
Sec100k	1.074886	1.354014469	32
homeradio	62.178	13.3753	32

**Correlations**

		Sec100k	homeradio
Pearson Correlation	Sec100k	1.000	.368
	homeradio	.368	1.000
Sig. (1-tailed)	Sec100k	.	.019
	homeradio	.019	.
N	Sec100k	32	32
	homeradio	32	32

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.368 <sup>a</sup>	.135	.107	1.279765628	.135	4.701	1	30	.038

a. Predictors: (Constant), homeradio

b. Dependent Variable: Sec100k

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.700	1	7.700	4.701	.038 <sup>a</sup>
	Residual	49.134	30	1.638		
	Total	56.834	31			

a. Predictors: (Constant), homeradio

b. Dependent Variable: Sec100k

Model	Coefficients <sup>a</sup>						
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-1.242	1.092		-1.137	.264	1.000	1.000
homeradio	.037	.017	.368	2.168	.038		

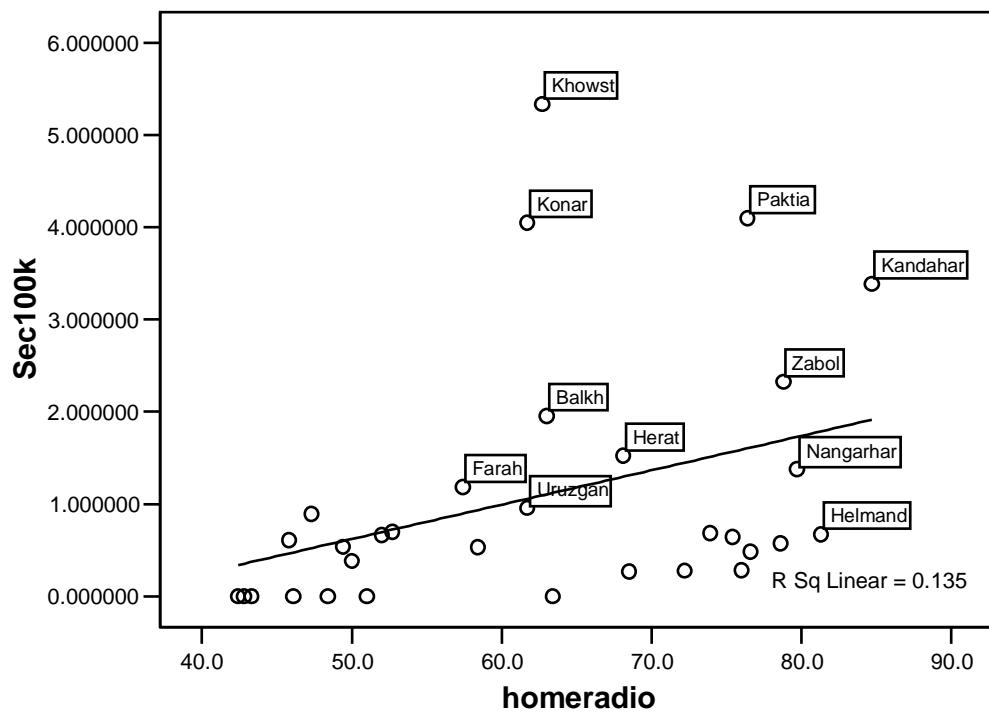
a. Dependent Variable: Sec100k

### Analysis:

In the ANOVA table, we find the F-value (4.701) and its probability level of 0.038. Using a p-value of  $0.038 < 0.10$ , we reject the null hypothesis that there is no linear relationship between percent of population with home radios and rate of violence against NGO's. There is a weak positive relationship between home radios and violence against NGO's. A R-square value of 0.135 indicates that only about 14% of the variation in the rate of violence is explained by the variation in the percentage of radios in people's homes. This means that there still is a quite large amount of variation that is not captured by the model. This can be seen as well by looking at the scatter plot and the best fit line. Important to note again are the provinces of Khowst, Paktia, Konar and Kandahar which all lie far from the best fit line. A nonlinear model might better represent the relationship between these two variables. Later, we will see that homeradio remains significant as an independent variable even after all other factors are incorporated.

The equation for **Sec100K** as a function of **homeradio** is:

$$\text{Sec100K} = -1.242 + 0.037 * \text{homeradio}$$



## Stepwise Multiple Regression Model:

### Descriptive Statistics

	Mean	Std. Deviation	N
Sec100k	1.02141098	1.207875713	26
BorderPak	.31	.471	26
Distance	360.27	240.265	26
USmilitary	.54	.508	26
WarlordYN	.58	.504	26
Poppy	3056.15	4975.874	26
Inversefoodaidper	.134363273	.1937168874	26
Learnspac100k	.3856	.23362	26
homeradio	61.192	13.8480	26

### Correlations

		Sec100k	BorderPak	Distance	USmilitary	WarlordYN	Poppy	Inversefoodaidper	Learnspac100k	homeradio
Pearson Correlation	Sec100k	1.000	.593	-.158	.410	.022	.038	.457	.366	.533
	BorderPak	.593	1.000	.003	.450	.065	.529	.241	.282	.424
	Distance	-.158	.003	1.000	-.048	.632	-.050	-.249	-.234	-.379
	USmilitary	.410	.450	-.048	1.000	-.168	.228	.114	.311	.580
	WarlordYN	.022	.065	.632	-.168	1.000	-.086	.166	.082	-.309
	Poppy	.038	.529	-.050	.228	-.086	1.000	-.037	-.002	.356
	Inversefoodaidper	.457	.241	-.249	.114	.166	-.037	1.000	.673	.096
	Learnspac100k	.366	.282	-.234	.311	.082	-.002	.673	1.000	.013
	homeradio	.533	.424	-.379	.580	-.309	.356	.096	.013	1.000
Sig. (1-tailed)	Sec100k	.001	.220	.019	.457	.426	.009	.033	.003	.003
	BorderPak	.001	.	.494	.011	.376	.003	.118	.082	.015
	Distance	.220	.494	.	.408	.000	.404	.110	.125	.028
	USmilitary	.019	.011	.408	.	.206	.131	.289	.061	.001
	WarlordYN	.457	.376	.000	.206	.	.338	.209	.346	.062
	Poppy	.426	.003	.404	.131	.338	.	.429	.496	.037
	Inversefoodaidper	.009	.118	.110	.289	.209	.429	.	.000	.320
	Learnspac100k	.033	.082	.125	.061	.346	.496	.000	.	.474
	homeradio	.003	.015	.028	.001	.062	.037	.320	.474	.
N	Sec100k	26	26	26	26	26	26	26	26	26
	BorderPak	26	26	26	26	26	26	26	26	26
	Distance	26	26	26	26	26	26	26	26	26
	USmilitary	26	26	26	26	26	26	26	26	26
	WarlordYN	26	26	26	26	26	26	26	26	26
	Poppy	26	26	26	26	26	26	26	26	26
	Inversefoodaidper	26	26	26	26	26	26	26	26	26
	Learnspac100k	26	26	26	26	26	26	26	26	26
	homeradio	26	26	26	26	26	26	26	26	26

### Variables Entered/Removed(a)

Model	Variables Entered	Variables Removed	Method		
			Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).	Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).
1	BorderPak	.			
2	Poppy	.			
3	homeradio	.			

a Dependent Variable: Sec100k

### Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.593 <sup>a</sup>	.352	.325	.992253385	.352	13.046	1	24	.001
2	.676 <sup>b</sup>	.457	.410	.927653833	.105	4.459	1	23	.046
3	.772 <sup>c</sup>	.596	.541	.818646762	.138	7.533	1	22	.012

a. Predictors: (Constant), BorderPak

b. Predictors: (Constant), BorderPak, Poppy

c. Predictors: (Constant), BorderPak, Poppy, homeradio

d. Dependent Variable: Sec100k

### ANOVA<sup>d</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.844	1	12.844	13.046	.001 <sup>a</sup>
	Residual	23.630	24	.985		
	Total	36.474	25			
2	Regression	16.682	2	8.341	9.693	.001 <sup>b</sup>
	Residual	19.792	23	.861		
	Total	36.474	25			
3	Regression	21.730	3	7.243	10.808	.000 <sup>c</sup>
	Residual	14.744	22	.670		
	Total	36.474	25			

a. Predictors: (Constant), BorderPak

b. Predictors: (Constant), BorderPak, Poppy

c. Predictors: (Constant), BorderPak, Poppy, homeradio

d. Dependent Variable: Sec100k

### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error				Zero-order	Partial	Part	Tolerance	VIF	
1	(Constant)	.553	.234	.593	.2364	.027	.593	.593	.593	1.000	1.000
	BorderPak	1.523	.422		3.612	.001					
2	(Constant)	.677	.226	.795	2.990	.007	.593	.676	.675	.721	1.388
	BorderPak	2.041	.464		4.396	.000					
	Poppy	.000	.000		-.382	-2.112					
3	(Constant)	-1.384	.777	.659	-1.781	.089	.593	.643	.534	.657	1.522
	BorderPak	1.691	.429		3.942	.001					
	Poppy	.000	.000		-.459	-2.829					
	homeradio	.036	.013		.417	2.745					

a. Dependent Variable: Sec100k

#### Excluded Variables<sup>d</sup>

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
					Tolerance	VIF	Minimum Tolerance
1	Distance	-.160 <sup>a</sup>	-.974	.340	-.199	1.000	1.000
	USmilitary	.180 <sup>a</sup>	.976	.339	.199	.797	1.254
	WarlordYN	-.016 <sup>a</sup>	-.097	.924	-.020	.996	1.004
	Poppy	-.382 <sup>a</sup>	-2.112	.046	-.403	.721	1.388
	Inversefoodaidper	.334 <sup>a</sup>	2.109	.046	.403	.942	1.062
	Learnspac100k	.216 <sup>a</sup>	1.279	.214	.258	.921	1.086
2	Distance	-.181 <sup>b</sup>	-1.185	.249	-.245	.996	1.004
	USmilitary	.175 <sup>b</sup>	1.018	.320	.212	.797	1.254
	WarlordYN	-.064 <sup>b</sup>	-.402	.692	-.085	.976	1.025
	Inversefoodaidper	.278 <sup>b</sup>	1.806	.085	.359	.905	1.105
	Learnspac100k	.159 <sup>b</sup>	.974	.341	.203	.889	1.125
	homeradio	.417 <sup>b</sup>	2.745	.012	.505	.796	1.256
3	Distance	-.031 <sup>c</sup>	-.202	.842	-.044	.823	1.215
	USmilitary	-.039 <sup>c</sup>	-.219	.828	-.048	.605	1.653
	WarlordYN	.081 <sup>c</sup>	.545	.592	.118	.851	1.175
	Inversefoodaidper	.267 <sup>c</sup>	1.999	.059	.400	.904	1.106
	Learnspac100k	.197 <sup>c</sup>	1.395	.178	.291	.881	1.135
							.579

- a. Predictors in the Model: (Constant), BorderPak
- b. Predictors in the Model: (Constant), BorderPak, Poppy
- c. Predictors in the Model: (Constant), BorderPak, Poppy, homeradio
- d. Dependent Variable: Sec100k

#### Collinearity Diagnostics<sup>d</sup>

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	BorderPak	Poppy	homeradio
1	1	1.555	1.000	.22	.22		
	2	.445	1.869	.78	.78		
2	1	2.171	1.000	.09	.08	.08	
	2	.498	2.088	.90	.11	.21	
	3	.332	2.559	.01	.81	.71	
3	1	2.976	1.000	.00	.03	.04	.00
	2	.672	2.105	.02	.16	.24	.01
	3	.332	2.995	.00	.73	.70	.00
	4	.020	12.143	.98	.07	.02	.99

- a. Dependent Variable: Sec100k

#### Casewise Diagnostics<sup>d</sup>

Case Number	Provinces	Std. Residual	Sec100k	Predicted Value	Residual
16	Khowst	3.405	5.333333	2.5457600	2.78757297

- a. Dependent Variable: Sec100k

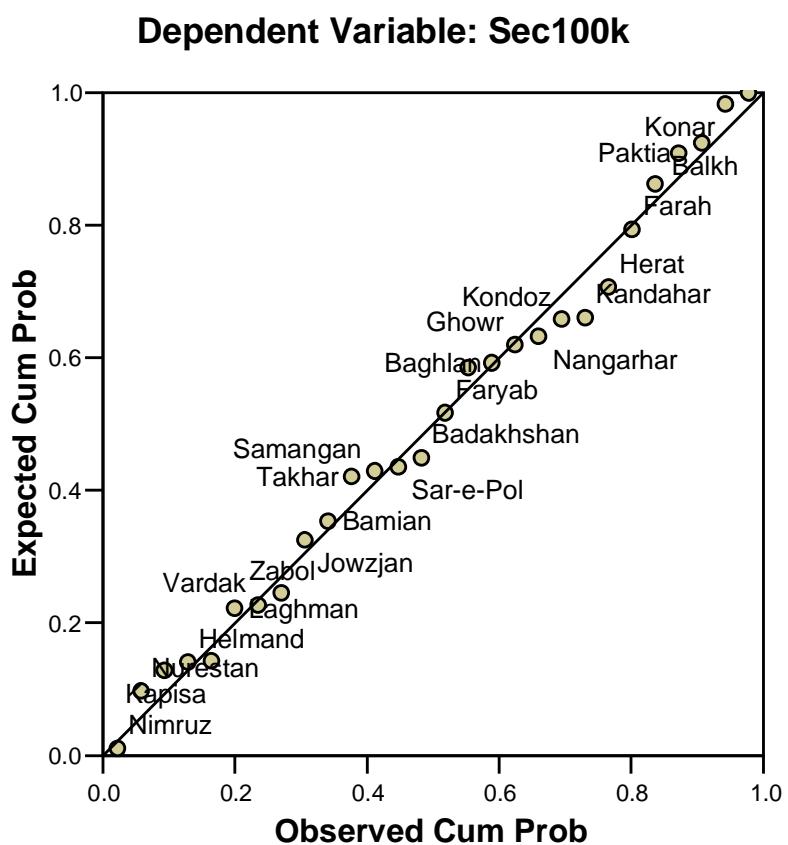
**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-.24877143	3.04752970	1.10920439	.956653300	28
Residual	-1.879045606	2.7875729	.061612589	.933671063	28
Std. Predicted Value	-1.362	2.173	.094	1.026	28
Std. Residual	-2.295	3.405	.075	1.141	28

a. Dependent Variable: Sec100k

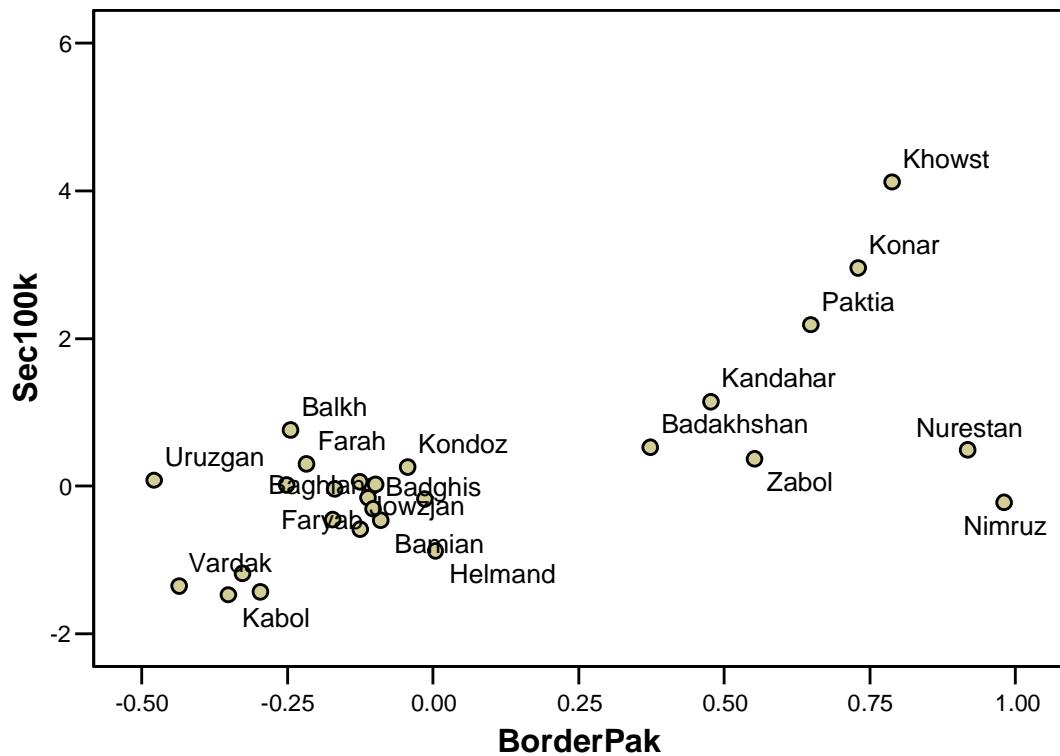
## Charts

**Normal P-P Plot of Regression Standardized Residual**



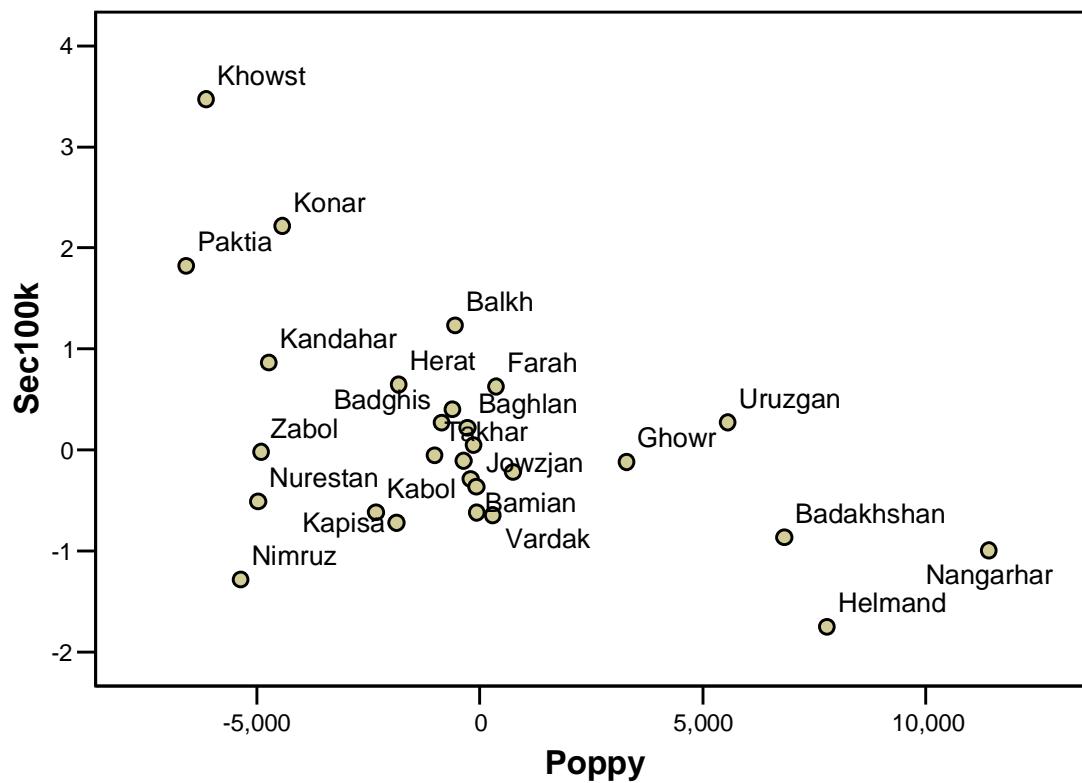
## Partial Regression Plot

Dependent Variable: Sec100k



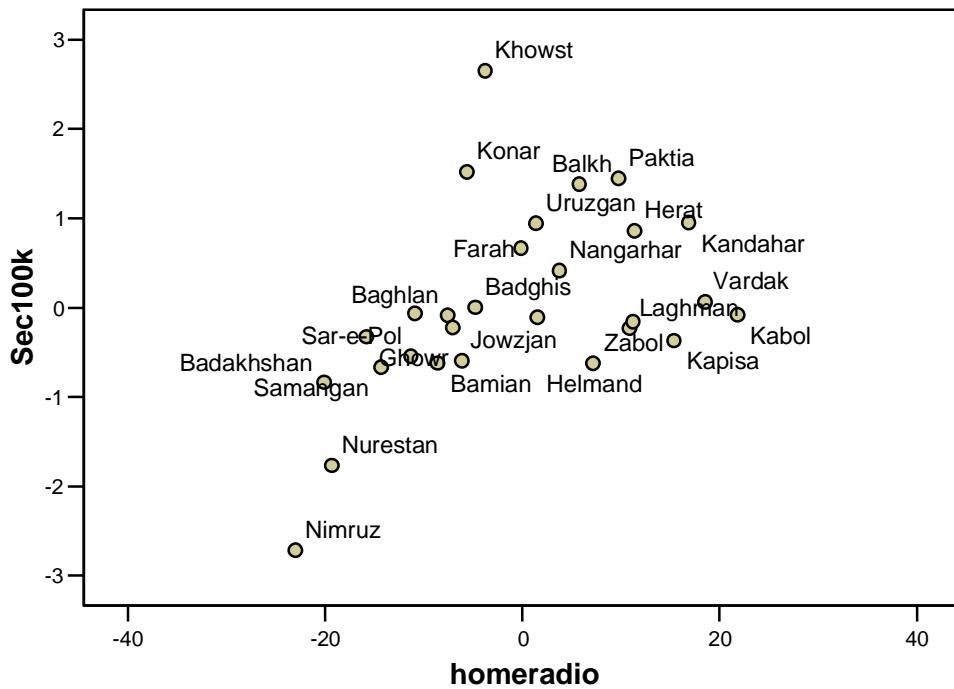
## Partial Regression Plot

Dependent Variable: Sec100k



## Partial Regression Plot

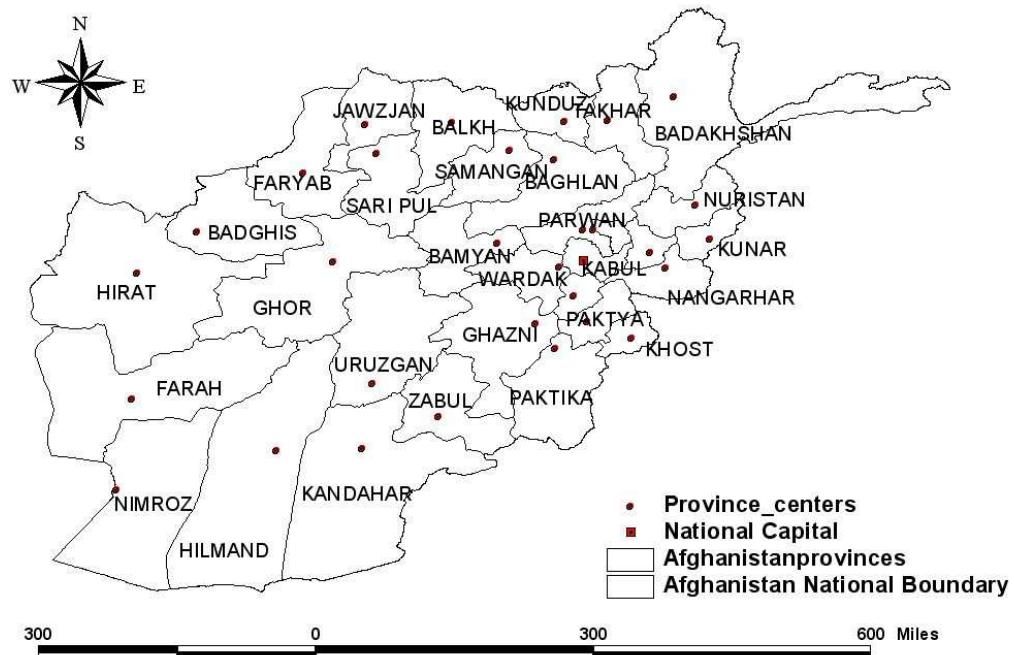
Dependent Variable: Sec100k



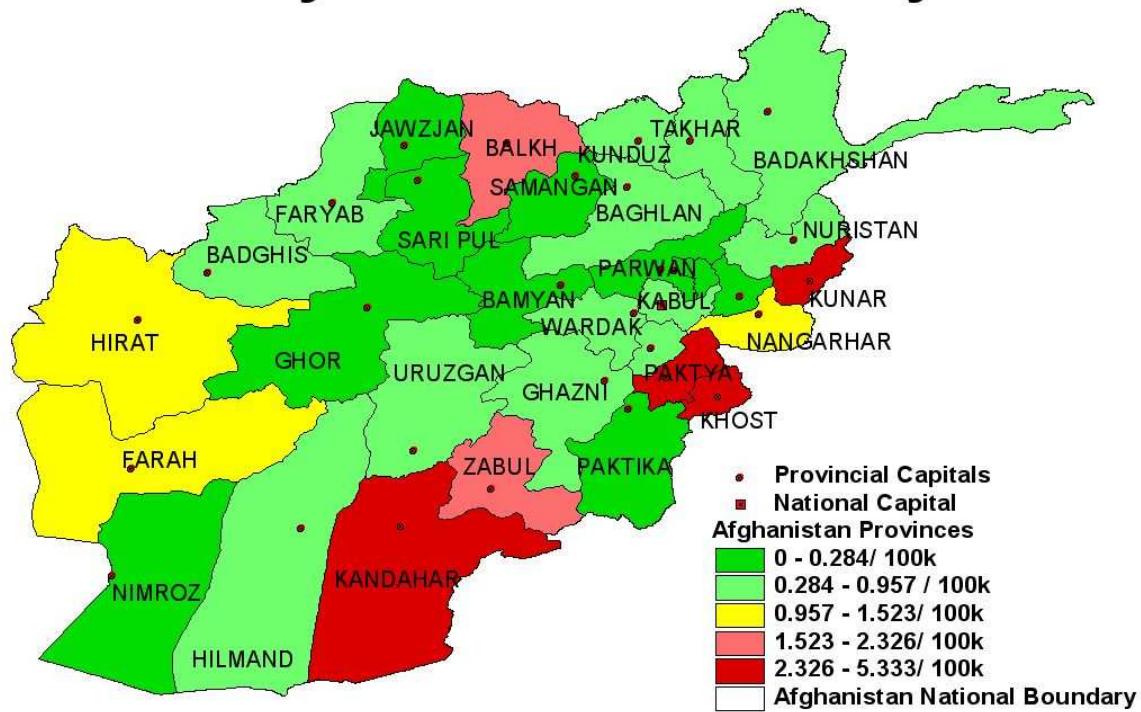
**APPENDIX C:**

**MAPS CREATED FOR  
AFGHANISTAN ANALYSIS**

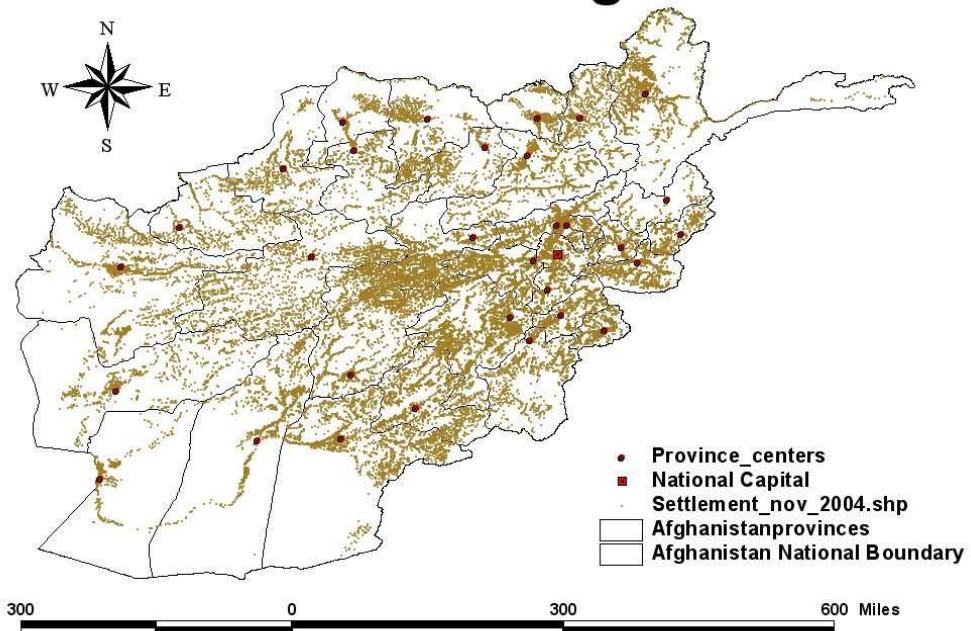
# Provinces of Afghanistan



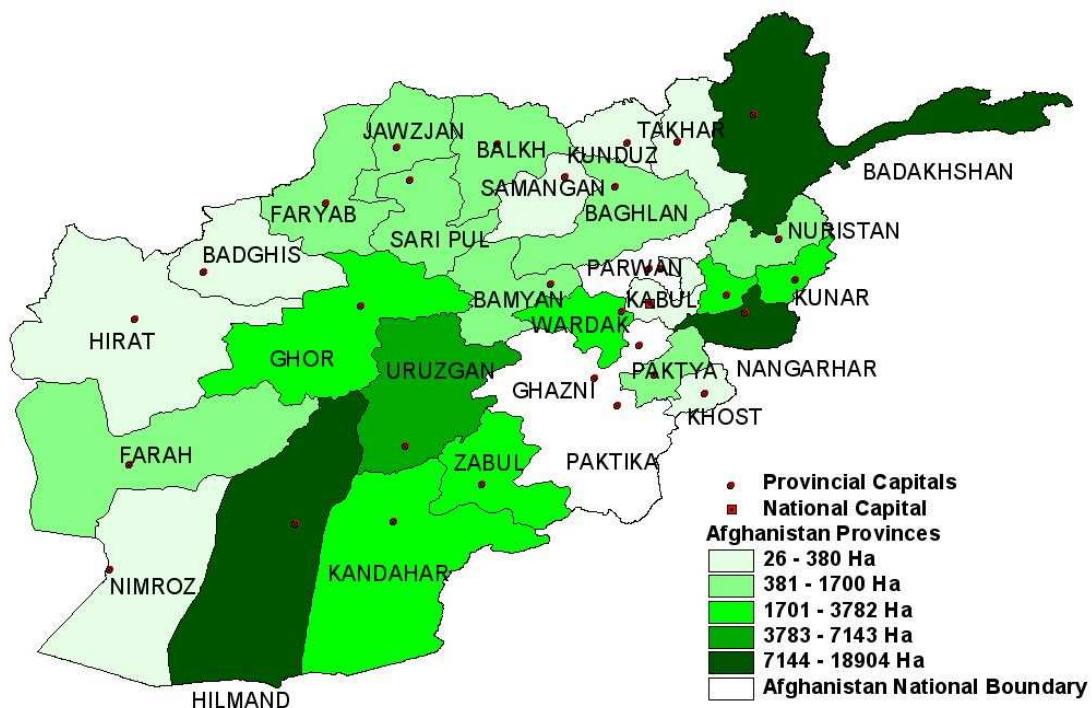
## NGO Violence in Afghanistan 1 January 2003 - 15 February 2004



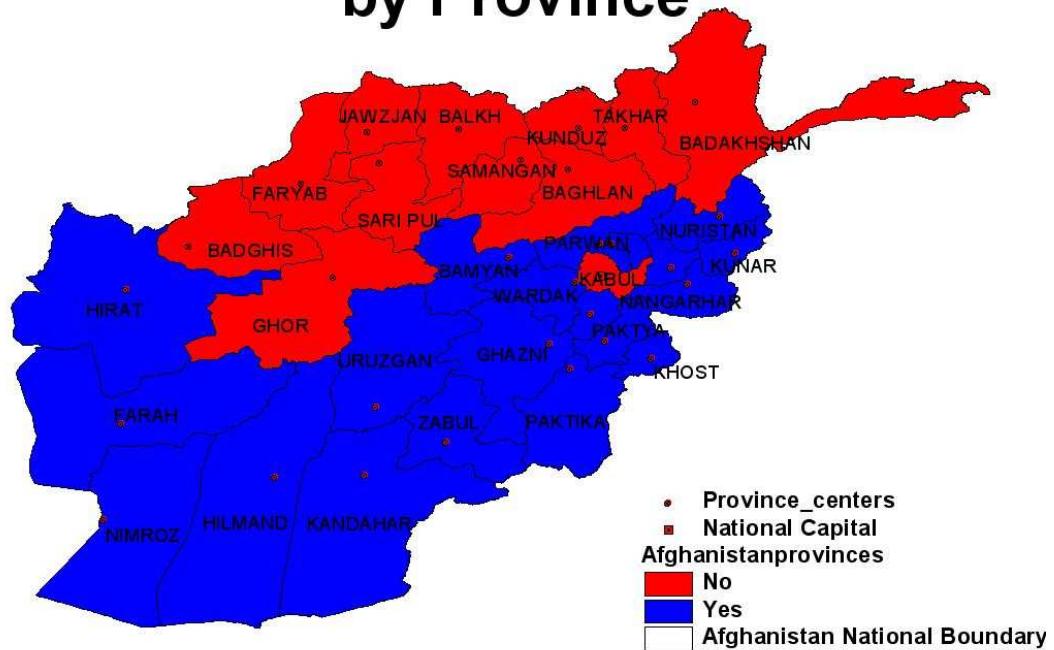
## Settlements of Afghanistan



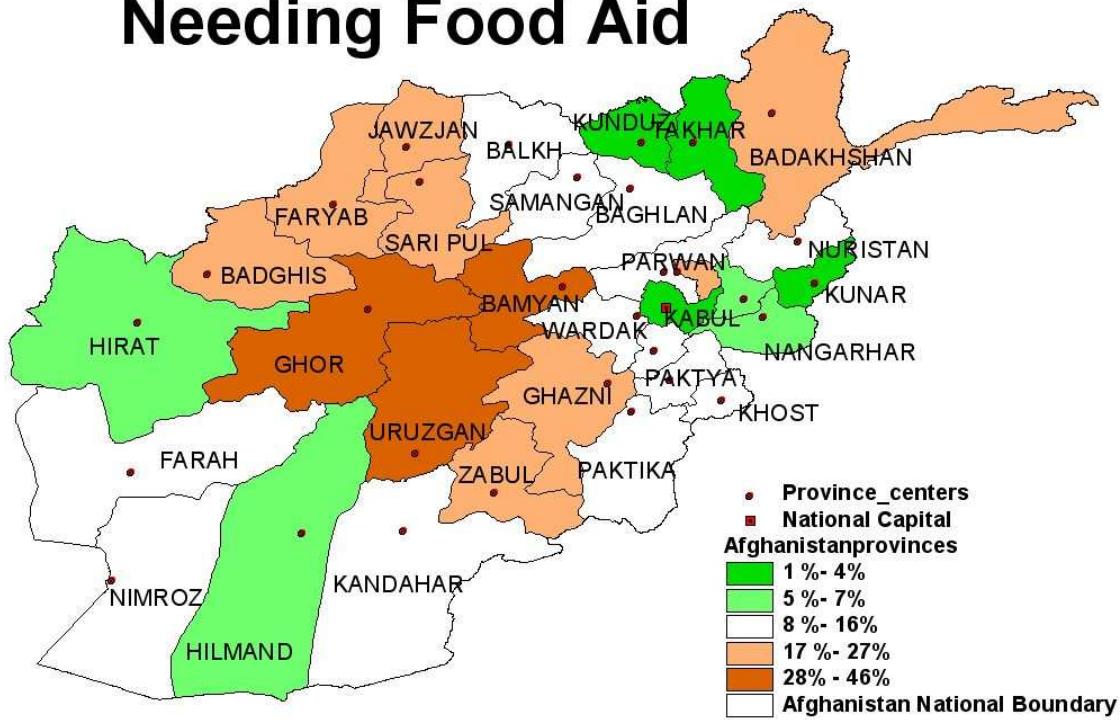
## Poppy Cultivation-2003



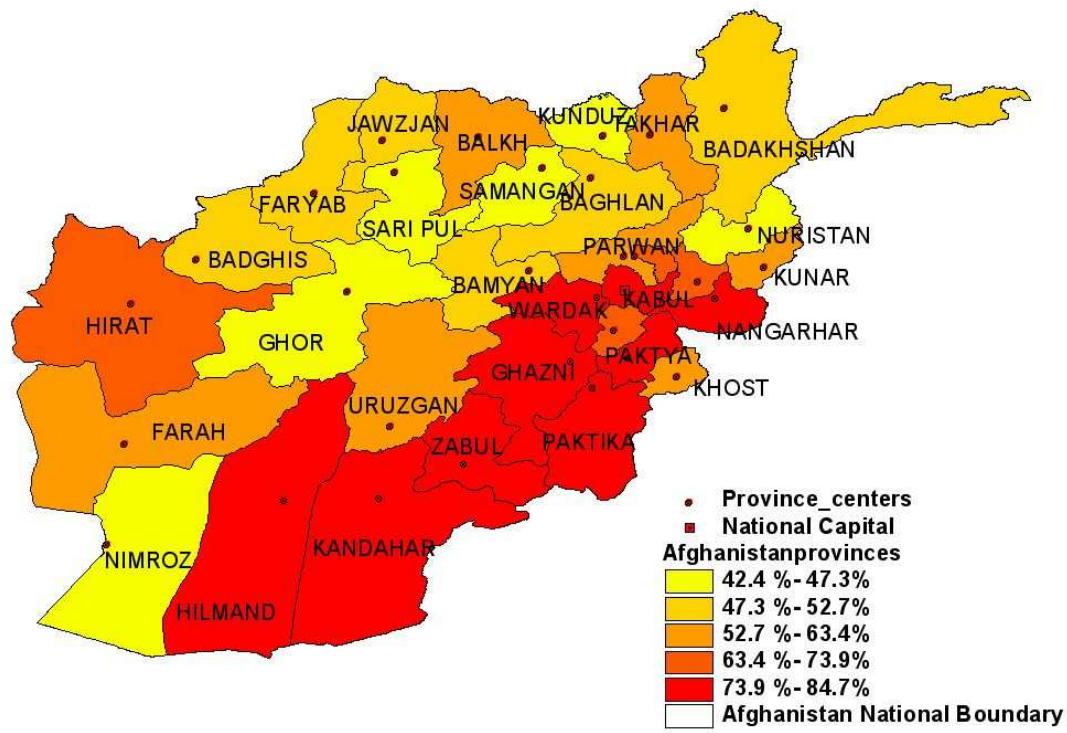
# US Military Major Operations by Province



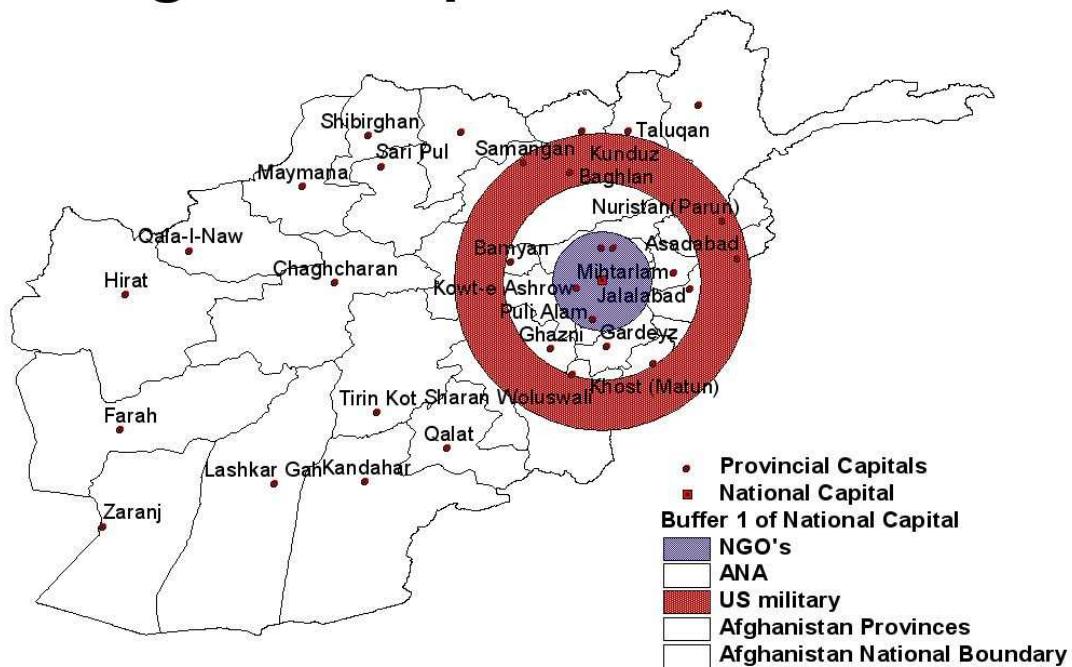
## Percentage of Population Needing Food Aid



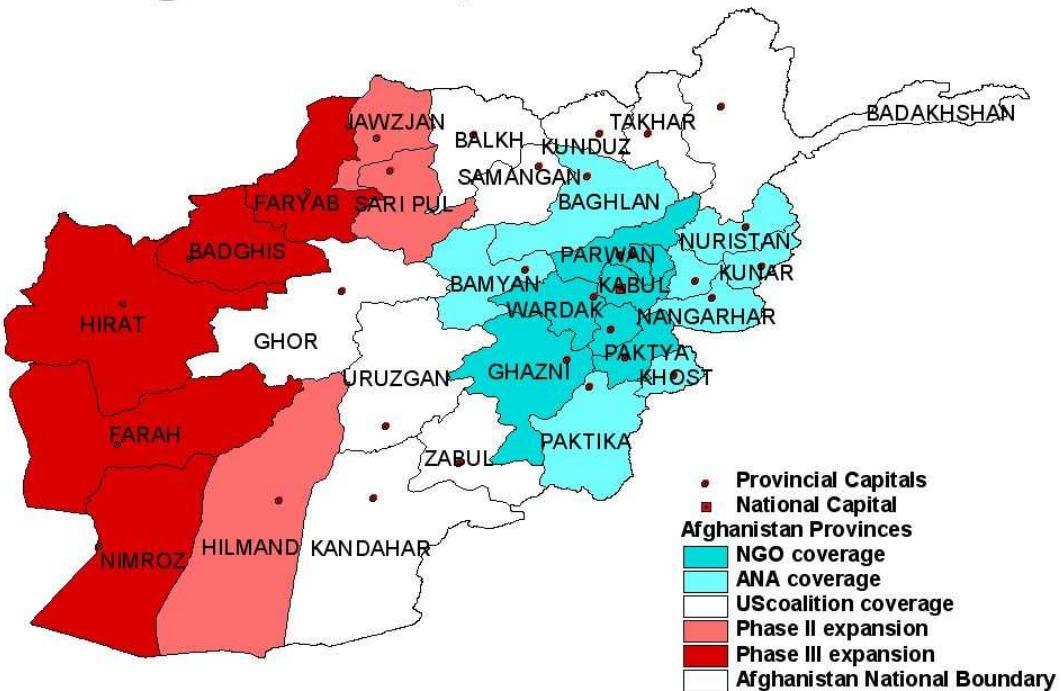
# Percentage of Homes with a Radio



## Strategy Option- Integrated Expansion from Kabul



# Strategy Option- Integrated Expansion from Kabul



**APPENDIX D:**

**INTERVIEW NOTES**

Notes from interview with source 2-IA:

Location: Monterey

Date: 12/3/2004

**Profile:**

- Male, US Army Officer, over 9 years experience
- Served in Afghanistan for 6 months
- Worked with both US military and Afghan Army units

**Summary of Interview:**

Source received an overview of the arguments reflected in author's paper. 2-IA thought there was little significance between the level of violence and the distance from Kabul. 2-IA thought the level of violence was more the product of warlords and former Taliban leaders within certain areas.

2-IA witnessed a large amount of poppy transactions and seizures in Afghanistan. He thought that the poppy was very important to the warlords and the Afghan economy. He believed there is a high level of corruption in the Afghan national government and this adds to the problems for development. He also believes that the warlords are a serious threat to Afghanistan's government. They need to be either eliminated or brought into the governing process.

2-IA did not believe that the US military created more violence against NGO's. He thought that the military happened to be located where the greatest threats are. He thought co-opting the warlords might be a problem. But, he thought the warlord's have an immense amount of control in the regions and have for a very long time. Therefore, it might be hard for the central government to assert control in the short term.

2-IA thought the provinces near the Pakistan border were still full of violence from insurgents crossing back and forth across the border and the large amount of drugs that are moved through the area.

2-IA believes that the Afghan National Army is growing and improving every day. He thought they were very well trained and were successful in their operations. He believes aid and development projects should be incorporated with the Afghan Army so that the development workers are seen as help from the Afghan central government and not tools of the US military. When asked what he would do if put in charge of development in Afghanistan, 2-IA thought the Afghan Army should continue to be expanded. The ANA should take control of the country. Important in preventing the corruption of the military is replacement of many of its leaders with new people. He thought the US military should help select the next generation of military leaders in order to avoid corruption.

In terms of economics, 2-IA believes that the poppy cultivation should not be touched at this time. It is the economic lifeline for the country right now and destroying the poppy farms will increase violence against aid workers. 2-IA thought aid should be focused and coordinated from Kabul. The purpose should focus on education, infrastructure development, wells for water, and microcredit.

2-IA mentioned other variables that might account for some difference in violence against NGO's. Those variables were seasonal data, prison systems, water wells, automobile per capita, mosque density, density of former mujihadeen, and number of ANA units in the area.

Notes from interview with source 2-VR:

Location: Monterey  
Telephone interview  
Date: 11/24/2004

**Profile:**

- Male, US Army Officer, over 9 years experience
- Served in Afghanistan for roughly 18 months and on 6 separate occasions
- Operated extensively in the south and eastern provinces

**Summary of Interview:**

Source received an overview of the arguments reflected in author's paper. 2-VR thought there was little significance between the level of violence and the distance from Kabul. 2-VR thought the violence was concentrated on the border with Pakistan.

2-VR witnessed poppy cultivation in many different locations. He thought the farmers were not the ones causing the violence. Generally, they were peaceful and merely cultivated the poppy. The traffickers of poppy were far more dangerous.

2-VR had no knowledge of problems dealing with different ethnic groups. Overall, he thought he was probably not a good reference on this subject.

2-VR did think that the warlords were a problem. He felt the local population would be loyal to the highest bidder. By this he meant, if the US forces paid the most money then the local militias would be loyal to US interests. If the militia leaders paid the most, then the local militias would be loyal to them.

2-VR did think that the presence of US military in the same regions as the NGO workers did increase the violence against NGO workers. He believes the local people see the NGO workers as spies or part of the US military. The locals do not trust the NGO workers in these provinces. 2-VR thought the NGO workers were partly to blame for this phenomenon. He explained that the NGO's often do not coordinate with the military, co-locate their bases of operations, and drive the same vehicles and use the same equipment as the military. It is very hard for local people to distinguish between the military and the NGO workers. He also thought the NGO workers were sometimes very naïve about the security situation and were often unaware of the level of danger. He thought many of the attacks on NGO's weren't because they were NGO's but were simply robberies. Many bandits rob anyone that has items of value, regardless of their affiliation.

2-VR thought that the poppy cultivation was not necessarily that big of a problem. He thought the violence was created mainly by former Taliban members and not just because of poppy cultivation.

2-VR believes the Afghan people need to establish a national identity in order to create a successful democracy. The people do not see themselves as Afghans. If a security incident occurs in their towns, they usually turn a blind eye and regard it is as not being their problem. Another critical issue identified by 2-VR was continued infrastructure development. He thinks Afghanistan must create better infrastructure and increased business in order to be successful.

Notes from Interview with Source 3-JZ:

Location: Monterey Institute  
Date: 11/22/2004

**Profile:**

- Female, 25 years of age, Nationality: Afghan-American
- Born in Kabul, Afghanistan Raised in Queens, NY by Afghan parents.
- Presently a Graduate Student in International Policy Studies
- College graduate
- Visited and worked in Afghanistan in 2002 and 2003.
- Worked with the Afghan Government, Ministry of Finance, Kabul & Global Exchange in Kabul
- Prepared several research papers on Afghanistan development, education and drug trade
- Worked as a US military contractor to train US soldiers deploying to Afghanistan with NGO relations and interacting with local Afghans.

**Summary of Interview:**

After going over source's background, a brief discussion of proposed paper and theme commenced. 3-JZ was not aware of the Afghan NGO Security Office. However, 3-JZ noted there was a lot of information present in 2003 in Kabul. It is likely that this is a credible office with reliable information.

As for discussion of paper topic, 3-JZ did not believe the level of violence was directly related to the distance of NGO groups from Kabul. Source stated there is a general lack of security anywhere outside of Kabul. This was due to the concentration of security elements in and around the immediate vicinity of Kabul. 3-JZ also noted that there seemed to be no relevant evidence during her time in country that indicated one ethnic group was more or less responsible for the violence. 3-JZ characterized the violence as a product of former Taliban members still at large in the country with the ability to attack unarmed NGO workers.

Source believed the provinces closest to the Pakistan border contained a greater concentration of Taliban members. These regions were more likely to experience violence and also had the weakest concentration of security forces.

3-JZ agreed with the belief that the US military exasperates the insecurity problems in the provinces in which they operate because they co-opt local warlords. Source has worked with US military on training soldiers to operate better with NGO workers and locals in Afghanistan. 3-JZ believes the US military does a poor job in winning the support of locals and/or NGO's. She believes a large part of the reason for NGO worker attacks is because NGO's are identified as a proponent of the US military. 3-JZ thought the PRT's hurt civil-military relations and were detrimental to NGO security. Source believed there was little or no coordination between NGO's, the US military, and the Afghan government. Development efforts seemed to be largely haphazard.

3-JZ noted that the areas where there is a large amount of poppy cultivation are the same ones that have little security. If there were sufficient security, the Afghan government would eliminate the poppy production.

Source recognized the problems with warlords in the country. Stated there were two options for warlords: include them in government or destroy them entirely.

She believed that more were opting for government but was concerned about how this might work in the future.

3-JZ provided specific story on province of Jawzjan near the border with Turkmenistan. Source explained that during a development project in the province it was learned that Turkmenistan had provided oil, electricity and free education in the province for 10-12 years before the US invasion. Source stressed the importance of outside influences and pressures by nations bordering Afghanistan.

Source mentioned that another variable to consider is whether the province is bordered by Iran or Pakistan. Source also mention book, "Drugs, Something, and Money" by Peter Hall as a source on poppy influences. She also mentioned that the Afghanistan Research & Evaluation Unit (AREU) was a good source of information and could be found on line.

**Profile:**

- Visiting Professor, Monterey Institute of International Studies
- Professor at University in Japan
- Worked with Japanese NGO projects in Afghanistan in summer of 2004, specific knowledge on Small Arms Nonproliferation

**Summary of Interview:**

Source received an overview of the arguments reflected in author's paper. Prof. Inada thought the data from the Afghan NGO security office was accurate and reliable. Prof. Inada thought the distance from Kabul would not be specific. He thinks the attacks are the reflection of central governments relationship within each province. Additionally, the warlords attack an NGO intentionally because it is the equivalent to attacking the central government. This is a way for the local warlords to counter the power of the central government and maintain local control.

Prof. Inada thinks the US military is deployed in the most dangerous regions in Afghanistan and they are not causing more violence against NGO's in the area. He believes the US locates there because it is the most dangerous area. As he said, "the US is doing the dirty work in Afghanistan."

Prof. Inada believes that the PRT's are a last resort for dangerous situations where all other forms of aid cannot reach. The other aid programs and the US military do not like to do this. Japanese agencies would prefer to not co-locate with a PRT but sometimes it is necessary to get aid to those areas that need it the most.

Prof. Inada thought the author should trace the troop strength of US and ISAF forces, Afghan National Army forces, and compare that with the level of violence against NGO's. He suspected there might be a relationship between these two numbers. A caveat by Prof. Inada was that the level of violence against NGO's does not always measure the level of violence in the country. Often times, NGO's withdraw back to Kabul during dangerous times which is the case around the Afghan Presidential election.

Prof. Inada thought the warlords were the key to eliminating violence but that depended on the province. Dostum is an example of a strong warlord but every case is different. He thought that the Bamian province was the safest area. He thought that aid was dispersed based on the political will of the donors. Japanese International aid agency likes to show their will in most dangerous provinces. But, they were also pushed by President Bush to engage in aid activities in Kandahar. Prof. Inada also thought the actions and policies of Aid organizations were somewhat responsible for the level of violence.

Prof. Inada said the Japanese government has given up on disarming the population. It is impossible to accomplish. They are now focusing on DDR. Prof. Inada thinks that the warlords must be incorporated into the government.

Paul Barker writes:

"Thanks for forwarding the summary of your interesting study and offering us the opportunity to comment on it.

One key bit of information that I have not yet decoded is the meaning of sec100k. Is that NGO security incidents per 100,000 people, or security incidents in a 100 kilometer radius, or what?

Your 3 major findings are curious:

1. Positive correlation between NGO attacks and Pakistan border. This is very logical given the proximity of the area to insurgent havens in Pakistan.
2. Negative correlation between attacks on NGOs and poppy cultivation. Perhaps there is a desire of narco interests not to unnecessarily draw attention and threats to their crop. I would expect that this equation may inverse if eradication picks up steam in the spring.
3. Positive correlation between attacks on NGOs and radio ownership. I know there is a conscious effort by the coalition, government and some donors to use radios to get out pro peace and reconstruction messages, so this is a counterintuitive correlation. Maybe it is just a coincidence. I am not aware of commercial radio frequencies being used to spur anti-foreign and anti-government sentiments.

I don't know what your time and data constraints are, but if you could bring your analysis through the summer of 04 I think you would see some other trends. Such an analysis would include the murder of 5 MSF staff in Badghis, the murder of 11 Chinese road workers in Baghlan (admittedly not NGO staff, but alarming nonetheless), and the attacks on AKDN and other NGO offices in Badakhshan. All of these are areas beyond coalition patrol or influence. They are not Taliban strongholds either currently or historically.

I do not think that proximity to Kabul equates to greater security. We had the murder of 6 SDF staff in Kabul province. Insurgent activity in Logar and Wardak is a fairly strong risk factor. Paghman district just west of Kabul is increasingly seen as risky territory due to Sayaf base and criminal elements. Conversely the Hazara areas in the center of the country are usually seen as some of the safest areas for NGO work. My intuitive sense is that the map you have on slide 13 may represent attacks on NGOs, but not necessarily threats. Paktika, Uruzgan, Helmand, Farah and southern Ghazni are seen as quite insecure areas by NGOs. If there have been fewer attacks, it is because fewer are there.

I wonder if you have sufficient data to map different kinds of security threats. My sense is that in the south and east the most severe threats are militant anti-government elements, be they neo-Taliban, al-Qa'ida supporters, Hekmatyar supporters or whatever. In the N and NE the greatest threats would be militia and criminal elements. In some cases there may be links to narco elements associated with insecurity in the N and NE. In the Center

and west I think the greatest threats are criminal elements. So I guess I am seeing a general correlation between areas with strong Pushtun ethnicity and anti-government insurgency, Tajik and Uzbek areas and warlordism and criminality, and Hazara areas with general stability, but some criminal concerns.

The US military presence in the south and east intentionally correlates to Taliban/al-Qa'ida anti-government insurgency. It is difficult to say how much their presence (the B-52 factor) intimidates populations and suppresses violent urges, and to what extent its sometimes rough search, detention and interrogation tactics unnecessarily exacerbate security tensions. It is the very clear view of NGOs that we are more secure if we are not seen to have any association with the military in the south and east. In the North and center association with the military is not seen as so detrimental to our security, although it also isn't seen to help much.

Strong warlord presence in a province may be seen as supportive of NGO security to the extent that the warlords/commanders are seen as supportive of security in general and the aid community in particular. Examples would be Herat under Ismail Khan and Uzbek provinces under Dostom. But when warlord spheres interact, there is quite real fighting and danger to NGO and other innocents in the area.

I have copied Michael Kleinman, our advocacy and policy advisor, Nick Downie of Anso, Nazhand who oversees security issues for CARE Afghanistan, and Bob MacPherson who is in charge of CARE USA's security concerns. Some of them may wish to comment further on either your or my analysis.

Best of luck with this work.

Paul Barker

Country Director

CARE International in Afghanistan

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End of transmission.

Michael Kleinman writes:

"Paul Barker cc'ed me on some of the earlier emails, and I just wanted to send you a quick message, building on Paul's earlier comments. I'm thrilled that you're looking into this topic -- the question of NGO security is something we're obviously very interested in here in Afghanistan, especially placed in the broader context of civil-military affairs and the possible blurring of the lines between civilian and military actors, as the military engages more and more in traditionally humanitarian reconstruction and development work.

Not to repeat Paul's analysis, but a few points. First, I would be surprised if there continues to be a negative correlation between attacks on NGOs and opium cultivation, especially as the 2005 eradication campaign gets under way in late January / early February. In the past, poppy eradication has been a disjointed and corruption-prone process (at times under the control of the very provincial government officials who are themselves involved in the drug trade), with the result that at no point over the past few years has it posed much of a threat to drug traffickers or cultivators. Given the burgeoning growth of opium cultivation in Afghanistan -- according to UNODC, the area under poppy cultivation increased by 64% from '03 to '04 and opium now accounts for 40-60% of Afghanistan's GDP -- there will a much greater focus on eradication in '05 than ever before, driven to a large extent by US pressure. The goal is to eradicate around 30,000 hectares in key poppy producing provinces (out a country-wide total of around 131,000 hectares). The key variable in terms of NGO security might not be poppy production per se, but instead efforts by the government to eradicate the poppy crop and arrest key traffickers -- i.e. there might be more violence (including attacks against aid workers) the more the government tries to impose its control over poppy-growing areas.

(In the long run, NGO security in Afghanistan will be greatest in areas where the government has established some modicum of effective control; both warlords and poppy cultivation are a clear sign that the government's writ does not extend particularly far at the moment.)

Second, if you have the time, it might be interesting to broaden your analysis vis-a-vis the hypothesis that "if US military forces are present in the region, it is more likely the group will come under attack." Our security analysis to date hasn't been so much concerned with the mere presence of military forces in a region, but instead with whether those forces are engaging in reconstruction and development work (the "blurring the lines" issue mentioned above). In short, we're concerned that when

military forces begin to do work traditionally done by NGOs, then local populations and insurgents begin to confuse the difference between military and humanitarian actors, which increases the risk to NGO aid workers.

Both Coalition and ISAF forces in Afghanistan have deployed Provincial Reconstruction Teams (PRTs) in Afghanistan -- joint military-civilian units with a broad mandate to win hearts and minds by both supporting local security forces and undertaking a range of development work. In the past, we've said that this blurring of the lines leads to greater threats to NGO security, but we haven't done a particularly good job in quantifying or supporting this statement. Instead, we simply point to the growing number of attacks on aid workers as evidence that blurring the lines undermines NGO security.

Over the coming few months, I'm going to be focusing more on this issue, and I'd very much like to hear about your ongoing research, and any research on comparative NGO security studies. The issue of NGO security is a critical field, and I'm afraid one which will only become more and more significant in the coming years. Let's certainly stay in touch, and all the best,

Michael

PS -- if there's anyone in particular you would like to speak to out here, let me know...I'll see what I can do...

Michael Kleinman  
Advocacy Coordinator  
CARE Afghanistan

“End of transmission.

**APPENDIX E:**

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<sup>22</sup> Population statistics by province are derived from Central Office of Statistics, census data March 2003 at [www.aims.org.af](http://www.aims.org.af).

<sup>23</sup> The distance from each provincial capital to the national capital was done using an Afghanistan International Travel Map in 1: 1,000,000 scale. The author measured each of these distances by hand using the maps scale for kilometers.

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<sup>25</sup> See notes from interview with source 3-JZ, 2-IA, and Professor Huichi Inada, see Appendix D.

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<sup>31</sup> Quote from interview notes with Professor Juichi Inada, see Appendix D.

<sup>32</sup> Quote from e-mail with Paul Barker, see Appendix D.

<sup>33</sup> Notes from Paul Barker e-mail, see Appendix D.

<sup>34</sup> Notes from interview with source 2-VR, see notes in Appendix D.

<sup>35</sup> Notes from interview with source 2-IA are located in Appendix D.

<sup>36</sup> Those provinces lying on the Afghanistan national border were marked using the Afghanistan Provincial Map found at the Afghanistan Information Management Service website:  
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<sup>41</sup> Notes from e-mail interview with Paul Barker, see Appendix D.

<sup>42</sup> Comments made by a Monterey Institute of International Studies Graduate Student at a presentation of this paper’s findings on 12/6/2004. She is from Kabul and has lived there the majority of her life.

<sup>43</sup> Pakistani officer located at the Naval Post Graduate School’s commented on the radio significance after hearing the findings of this paper.

<sup>44</sup> The original variable which represented the percentage of the population needing food aid was transformed into the inverse of the percentage of the population needing food aid. This transformation tried to capture the potential nonlinear relationship of percentage of population needing food aid.

<sup>45</sup> Quote from e-mail with Paul Barker, Afghanistan country director, CARE International, see Appendix D.

<sup>46</sup> Suggestion from e-mail with Paul Barker, see Appendix D.

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